Logistics Management Institute

Improving the Army's Job Order Contracting Program

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Executive Summary

Job order contracting is an innovative procurement technique designed to provide more responsive facility maintenance and repair and minor construction. It is intended to significantly reduce engineering and procurement lead-times by awarding a competitively bid, firm-fixed-price, indefinite-quantity, multitask contract to a single general contractor. The contract consists of detailed task specifications for a multitude of real property maintenance activities encountered within a specific geographic area.

Job order contracting was implemented Army-wide in 1988, and it has proved a responsive and efficient method for accomplishing quality project work. Additionally, JOC programs have been implemented by public, nonmilitary organizations at the federal, state, and local level. Numerous regulatory and other policy changes have occurred in the JOC programs since they were implemented. These changes vary among the military services and among nondefense organizations.

The U.S. Army tasked the Logistics Management Institute to compare the Army's JOC program with that of the other services and with nonmilitary organizations and to recommend changes in policies and procedures that would help the Army improve its JOC program.

The JOC program can be improved with realistic processes and methods. We interviewed numerous Army, Navy, and Air Force field activities and nonmilitary activities with diverse organizations, workloads, and geographic areas to identify the best techniques developed by field activities. During the interviews we searched for techniques and procedures that seemed to encourage the most efficient JOC programs and enhanced customer focus.

Specifically, we recommend that the Army do the following:

- Require JOC source selection training. All government personnel participating in the JOC source selection process should attend the training. This training would further instruct field personnel on source selection procedures and best value procurements.

- Consider using oral presentations in JOC proposal evaluations. In certain cases they could streamline the selection of the contractor and enable the installation to make a better-informed selection.

- Include liquidated damages clauses in Army JOCs. Although rarely assessed, they provide protection to the government for late completion or delivery of the contract work.

- Use an award fee or incentive provision clause to motivate JOC contractors. Such incentives are allowed by the Federal Acquisition Regulation and effectively counterbalance liquidated damage provisions.

- Allow the use of the R.S. Means Company, Inc., estimating system for Army JOCs. It is affordable, is updated annually, has an expanded list of line items, and has been successfully used by other services and organizations.

- Change the *Army Federal Acquisition Regulation Supplement* to allow economic price adjustments for option years, instead of requiring the contractors to propose each year's coefficients.

- Consider the development of Base Operating Support JOCs within the Army.

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Chapter 1
Introduction

BACKGROUND

Job order contracting is an innovative procurement technique designed to provide more responsive facility maintenance and repair and minor construction. It is intended to significantly reduce engineering and procurement lead-times by awarding a competitively bid, firm-fixed-price, indefinite-quantity, multitask contract to a single general contractor. The contract consists of detailed task specifications for a multitude of real property maintenance activities (RPMAs) encountered within a specific geographic area.

Use of a job order contract (JOC) avoids separate design, specification, and construction contracting actions. Prepriced units of work are used to help streamline the process. The contracts are awarded by competitive procedures. Upon award, a contractor receives individual task orders, also called delivery orders, based on continued levels of high performance. This incentive mechanism is unique to JOCs.[1]

JOCs are based on a proprietary or commercially available unit price book (UPB) that lists all tasks encompassed by a contract with a corresponding unit price. The UPB is project segment based and contains approximately 50,000 individual construction tasks that support RPMAs at the installation. In making offers on the contract, offerors propose two multipliers: one for work performed during normal working hours, and one for work performed during other than normal hours.[2] Multiplying the government's unit prices by the appropriate coefficient determines the total price. Should the task order include supplemental items that the UPB does not identify, the contractor and the owner jointly determine a fair price for these items. These items are added to the UPB work for a total cost of completing a task order. The items that are not included in the UPB are called either non-prepriced items (NPIs) or non-prepriced work (NPP).

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[1] Simplified Acquisition of Base Engineer Requirements (SABER) is the Air Force's equivalent to the Army and Navy JOC programs. SABER was developed based on the Army's JOC program. A SABER contract is an indefinite-delivery, indefinite-quantity contract with provisions for economic price adjustments. Contracts include real property maintenance, repair, and construction work. SABER is best suited for noncomplex projects involving minor construction and maintenance and repair that require minimum design.

[2] In some cases the contractors may propose four coefficients: residential during normal working hours, other than residential during normal working hours, residential during other than normal working hours, and other than residential during other than normal working hours.

After the basic contract has been awarded, the contractor and the installation representative discuss and establish the scope, quantity, and schedule for each proposed work order; the installation then issues a task order for the work. JOCs are usually subject to minimum and maximum contract amounts stated in the request for proposals (RFP).

The objective of job order contracting is to increase the responsiveness of RPMA support by decreasing the engineering and contracting lead-time without sacrificing cost, quality, or administrative control. In recent years, such support at military installations has increased in real terms, while the staffs of the Directorates of Public Works (DPW)—those responsible for RPMAs—have been decreasing. Likewise, the staffs of the installations' Directorates of Contracting, who provide the DPW with contractual support, have not increased. Prior to 1988 the increased workload, combined with the stagnant staffing levels, resulted in decreased RPMA responsiveness. Job order contracting was implemented to solve that problem.

Job order contracting was implemented Army-wide in 1988, and it has proved a responsive and efficient method for accomplishing quality project work. Additionally, JOC programs have been implemented by public, nonmilitary organizations at the federal, state, and local level. However, numerous regulatory and other policy changes have occurred in the JOC programs. These changes vary among the military services and among nondefense organizations.

The U. S. Army tasked the Logistics Management Institute to compare the Army's JOC program with that of the other services and with nonmilitary organizations and to recommend changes in policies and procedures that would help the Army improve its JOC program.

REPORT ORGANIZATION

The remainder of this report presents the results of our study. Chapter 2 describes the JOC policies and procedures for the Army, Navy, and Air Force. Chapter 3 discusses nonmilitary JOC programs. Chapter 4 describes some opportunities for improving job order contracting and recommendations that, if followed, will result in a more efficient JOC program for the U.S. Army.

Chapter 2
Military Job Order Contracts

This chapter begins by summarizing the relative advantages and disadvantages of using JOCs. We then describe JOC policies and procedures established by the Army, Navy, and Air Force.

ADVANTAGES AND DISADVANTAGES

Since a JOC requirement typically does not include complete design and specifications, negotiation is necessary to define the level of effort, such as materials, quantities, and processes, required to accomplish the construction task. With job order contracting, there are no direct cost savings in the price paid or in the cost of the contract administration effort. Indeed, additional dedicated administrative personnel are usually required to make JOCs work well.

Other advantages and disadvantages of using job order contracting are as follows.

Advantages

IMPROVED TIMELINESS

Job order contracting significantly reduces lead-times for acquiring support for repair and construction jobs by eliminating the need to develop design specifications each time an installation identifies a work requirement. Contracting lead-time is also shortened by eliminating the need to establish a contract or purchase order for each individual work requirement. The government contracts with only one general contractor, who then subcontracts the majority of the work requirement. As a result, procurement takes 3 to 9 months less than traditional contracting procedures.

STREAMLINED ENGINEERING AND DESIGN

For an RPMA, a separate design contract is typically not necessary. Job order contracting works well when the contractor is given minimal design and drawings, usually prepared by in-house engineering personnel. Use of JOCs eliminates the cost of the design contract normally required for preparing drawings and specifications for a sealed bid award. Because the contractor and the government jointly develop detailed scopes of work for each work order, the most practical and effective approach to projects is developed.

Reasonable Costs

Reasonable costs established in the unit price book are assured through the competitive award of the JOC. Both the contractor and the owner's technical representative prepare a work order estimate using the same UPB. The owner's contracting officer then checks the reasonableness of the contractor's line items and quantities by comparing it to the estimate prepared by the owner's technical staff. The majority of the unit costs are taken directly from the same UPB, so the reasonableness review usually focuses more on item quantities.

Better Performance

With job order contracting, the contractor's performance usually improves noticeably. This improvement is partly the result of the necessary interaction between the government and the contractor when they jointly scope the work requirements. This approach fosters a cooperative and mutually beneficial climate. However, if the contractor's performance is unsatisfactory, the government bears no obligation beyond the contract's minimum to continually place work with that contractor, giving the contractor a strong incentive to provide consistently high-quality construction.

Focus on Partnering

In a well-managed JOC the focus is on quality work completion rather than confrontation. The establishment of a continual relationship, in a partnering environment, with a dependable contractor should produce high-quality, more cost-effective service. Partnering usually includes off-site kickoff meetings prior to starting work on the contract and weekly progress review meetings.

Fewer Barriers to Small and Disadvantaged Businesses

Job order contracting provides more opportunity for small and disadvantaged businesses than do traditional procurement methods. In the past, these companies have faced significant barriers because of bonding and other government requirements. However, under a JOC, prime contractors provide bonds and satisfy other requirements. Then, subject to the subcontracting plans that are provided to the government, prime contractors are encouraged to hire small and disadvantaged businesses to perform many job order contracting services.

Effective Use of Year-End Funds

The JOC is an effective method for using year-end migratory funds. Projects can be scoped, estimated, and then shelved to await whatever year-end funds reach the DPW. When these migratory funds become available, it is easy to prepare the shelved task orders for award and ensure that the funds are used for high-priority,

cost-effective projects. When used with year-end funds, JOCs are an effective tool for reducing an installation's maintenance backlog.

Disadvantages

NONTRANSFER OF DESIGN COST REDUCTION

The reduction in design costs and increased responsiveness are not directly transferable to the office that bears the increased contract administration costs.

MORE INVOLVED NEGOTIATIONS

Task order negotiations may be difficult. Areas left for interpretation, such as non prepriced work or cost elements in the coefficient, may prolong task order negotiations.

ACQUISITION RESTRICTIONS

JOC is not designed for the acquisition of commodities, services subject to the Service Contract Act, or architectural and engineering services that are subject to the Brooks Act.

APPLICABLE REGULATIONS AND POLICY

Army

The Army Federal Acquisition Regulation Supplement (AFARS) Subpart 17.90, Job Order Contracts, prescribes policies, procedures, and limitations for the establishment and use of job order contracts. The Assistant Secretary of the Army for Installations, Logistics, and Environment, and the Assistant Secretary of the Army for Research, Development, and Acquisition established the Job Order Contracting Steering Committee in 1992 to develop recommendations for policies, guidance, procedures, and training for the U.S. Army JOC Program.

The U.S. Army's Center for Public Works (USACPW) Humphreys Engineer Center published the *Job Order Contracting Directory* in October 1996. The USACPW coordinates and supports JOC implementation for the Army. It also supports a telephone hotline for JOC installations through a private contractor, U.S. Cost, Inc., and publishes a newsletter called *JOCkey*.

In June 1995, the Steering Committee published the Army's JOC policy manual, *Job Order Contracting Guide*. The comprehensive manual includes five chapters:

- *Introduction.* Purpose, background, advantages, JOC organization, responsibilities and authorities, contracting considerations, and implementation.

- *Analysis of Appropriateness.* Applicability analysis, feasibility analysis, appropriateness and feasibility report.

- *JOC Acquisition Strategy.* Planning for acquisition, and contents of the plan for acquisition.

- *DPW—Planning Activities.* Preparation of the unit price book, statement of work, environmental coordination, technical library, source selection plan development, DPW pre-award activities, formal acquisition process, activation of the JOC element, and initial activities of the JOC element.

- *Work Execution and Contract Administration.* Purpose, job order execution, DPW administrative responsibilities, task order modifications, fiscal year-end planning, additional DPW functions, exercising options, and follow-on contracting.

Navy

The *Job Order Contracting Guide*, Naval Facilities Engineering Command (NAVFAC) P-68B, is the Navy's policy manual. It is divided into three parts:

- *Introduction.* Background, definitions, advantages, disadvantages, guidelines, and planning.

- *Pre-Award.* Source selection procedures, statement of work and specifications, coefficients, price analysis, term and use of option years, wages under the Davis-Bacon Act, liquidated damages (LDs), partnering, performance and payment bonds, bid guarantees, superintendence and quality control, and government-furnished property and equipment.

- *Post-Award Contract Administration.* Maintenance of even work flow, type of work accepted, non-prepriced line items, receipt of a work order/work request, and proposal development.

Air Force

The Air Force's contract program, called SABER (Simplified Acquisition of Base Engineer Requirements), is similar to the JOC programs of the Army and Navy. The SABER policy manual is "Appendix DD—Simplified Acquisition of Base Engineer Requirements Program" of the Air Force FAR Supplement (AFFARS). This appendix provides policies, procedures, and guidelines for implementing the program as described in AFFARS 5336.293. It is divided into four parts:

- *General.* Scope, definitions, program purpose, and limitations.

- *Acquisitions Planning and Source Selection.* SABER working groups, specifications and unit price book information, acquisition strategy, presolicitation activities, and RFP and source selection guidance.

- *Saber Program Execution and Contract Administration.* Processing civil engineer project orders, task order issuance and modifications, inspection and acceptance, adding NPIs to the unit price book, funding, LDs, and bonding.

- *Options and Follow-On Contracts.* Initial term options, option price adjustments, Davis-Bacon wage determinations, and follow-on contracts.

The Brooks Act, the Davis-Bacon Act, and the Services Contract Act also apply to SABER contracts. The Brooks Act requires Air Force engineering services to be acquired according to procedures set forth in FAR Subpart 36.6. SABER cannot be used to acquire engineering services listed in FAR Subpart 36.102.

CONTRACT CONSIDERATIONS

Prior to executing a JOC in the military services, there are three phases of contract considerations: acquisition strategy, pre-award (acquisition planning), and source selection.

Acquisition Strategy

ARMY

Prior to beginning the acquisition phase, the Army first conducts an applicability analysis and a feasibility analysis to determine whether a JOC would benefit the installation.

The applicability analysis begins by determining the value of work that a JOC would support. The Army's recommended minimum level of activity for an effective JOC is approximately $2 million of business per year. If the annual business is estimated to exceed $2 million, then a JOC feasibility study should be done. Individual task orders less than $2,000 that will be issued against the JOC should not be included in the estimate, because they are generally not cost-effective under a JOC.

During the feasibility analysis, the installation must determine whether a JOC would be appropriate, whether personnel are available, whether a unit price book could be produced, whether there are enough interested contractors within the geographic area, and the number of "coefficients" that would be needed at the installation. A coefficient is a numerical factor that represents costs (generally indirect costs) not considered to be included in the UPB, such as general and administrative and other overhead costs, insurance costs, protective clothing,

equipment rental, contingencies (such as changes in wage rates and the effect of inflation in option years), and also contractor's profit. Coefficients proposed by offerors are multiplied times the government-established unit prices in the unit price book to price a job or project on individual orders.

While determining whether a JOC would benefit the installation, the DPW should also examine existing cost-reimbursement and fixed-price support contracts to determine whether a JOC would present problems with respect to cost control or conflicts of interest.

When the appropriateness and feasibility analyses are complete, the DPW issues a summary report to the installation commander for implementation recommendation. The head of the contracting activity (HCA) or his designee is the final approval authority prior to developing a JOC solicitation.

NAVY

In the planning stages of a Navy JOC, the following criteria must be considered:

- *Small business considerations.* Frequently local small businesses are concerned that the type of work they normally perform for the Navy will be removed from competition by the JOC. Since the current practice is to issue JOC solicitations on an unrestricted basis, they face additional competition from large business.

- *Workload.* The JOC solicitation must state a contract maximum amount, which is a realistic estimate of the total that could be ordered during the contract base period (and option periods, if applicable). The amount of work available must be large enough to provide a fairly steady flow of work to the JOC contractor, since the contractor's continual presence on site causes a constant overhead to be incurred. A workload of at least $5 million to $8 million per year should be available during the duration of the JOC.

- *Staffing.* The success of a Navy JOC is due, in large part, to the commitment of the government acquisition team. Expertise is required in contract negotiation and administration, project management, engineering, cost estimating, construction inspection, and clerical support. Staffing needs tend to increase rapidly if a JOC is successful.

- *Training.* JOC staffs should have completed the following courses: Facilities Contracting Fundamentals, Facilities Contracts Pricing, and Construction Contracts Modifications. Construction inspectors need to have completed the required courses for their field of expertise, as well as basic quality assurance courses.

- *Commitment.* It may be expensive to establish a JOC program, and the benefits are not immediate. All government personnel should become familiar with the process and procedures for negotiating and administering a JOC task order *before* the contract is awarded.

- *Alternatives.* Prior to implementing a JOC, all other alternatives should be evaluated. Use of JOC will not solve all problems of an insufficient government work force or a growing backlog of work requests. JOCs will not alleviate the necessity for adequate engineering considerations or statements of work.

AIR FORCE

In the early planning stages of a SABER program, the Air Force encourages the contracting officers to establish an acquisition strategy panel (AFFARS 5307.104-91). Concurrently, the heads of the operational contracting and civil engineer organizations should jointly determine an optimum SABER organizational structure. The organization's structure should take into account the

- acquisition background and program objectives,

- anticipated SABER requirements and program value,

- master and guide specifications and the UPB, and

- anticipated delivery or performance period requirements.

The Air Force's contracting officer is charged with developing the acquisition plan and milestones that accompany it. The officer is encouraged to consider the following elements: the anticipated resources, the need to enhance competition and use streamlined source selection procedures, unique contracting considerations, budgeting and funding concerns, management information requirements, government-furnished property (e.g., office space, furniture, telephones, and utilities), environmental and security considerations, milestones for the acquisition cycle, and identification of the participants in the acquisition planning. While the contracting officer is responsible for the acquisition plan, the base civil engineer is responsible for the technical elements.

Pre-Award (Acquisition Planning)

ARMY

The contracting office, with support of other DPW staff, has overall responsibility for acquisition planning. A formal acquisition plan is required when the estimated annual JOC value exceeds $5 million, or $15 million for all years. Planning should begin before the fiscal year in which the contract will be awarded. The

Army advises the planners to avoid awarding a contract during the fourth quarter of a fiscal year.

A typical plan might include planned and actual dates for the various milestones (Table 2-1).

Table 2-1. Sample Acquisition Planning Milestones

Event	Planned date	Actual date
HCA/designee approval		
Acquisition plan approval (as required)		
Statement of work		
Specifications and unit price book		
Formation of JOC organization in DPW		
Data requirements		
Preparation of acquisition package		
Purchase request		
Commerce Business Daily synopsis		
Obtain presolicitation approval (as required)		
Solicitation review panel		
Source selection evaluation plan approval (as required)		
Issue solicitation		
Preproposal conference		
Evaluate proposals, audits, and field reports (as required)		
Obtain pre-business clearance memorandum		
Conduct discussions/negotiations		
Request and review revised proposals and/or best and final offers		
Obtain post-business clearance memorandum		
Contract award		
Debriefing		

Acquisition planning includes two elements: the acquisition background and a plan of action.

The background is a document that contains a statement of need, describes surrounding conditions, explains the capabilities being acquired, and states the performance period.

The plan of action contains 29 elements for planning consideration. Each of the elements is contained in the Army's *Job Order Contracting Guide*. Among them are budgeting and funding, contract structure, DPW organization staffing plan, and management information system requirements.

After the plan of action is established, the DPW then must develop a UPB, technical specifications, staffing and training requirements. The Army's UPB is derived from the Micro Computer-Aided Cost Estimating System (MCACES) database. This database is used to produce all of the Army's unit price books, which contain standardized task and price data. The USACPW furnishes copies of the UPB to each DPW on a reimbursable basis. UPB data are based on local material and equipment costs, Davis-Bacon wages, and installation-unique tasks. The contracting officer and the DPW should thoroughly review the UPB to ensure that it contains all installation-unique pricing and technical specifications. Installations can modify the UPB and make changes to the software prior to the finalized solicitation, but following contract award, changes are made only in extraordinary circumstances.

While developing the installation's UPB, the DPW must develop a statement of work for the JOC. The scope should include labor, equipment, and materials for repair, maintenance, and minor construction of buildings, structures, or other real property, and cannot include the purchase of supplies or nonconstruction services. All existing RPMAs should be reviewed so that there is no scope duplication. JOC work should not include a substantial portion of government-furnished material or equipment.

Additional presolicitation duties include deciding on quality control requirements, coordinating environmental assessments, establishing a technical library, and determining contractor logistics (e.g., whether contractors should be located on site, whether they can use shop facilities, how much should they be charged for utilities).

Upon conclusion of the acquisition planning phase, the JOC element should be activated as soon as all the JOC requirements can be identified. The JOC element includes members of either the Engineering, Plans and Services Division or the Engineer Resource Management Division, depending on the type of work that the JOC is expected to be used for and the personnel in each organization. Typically, this staff includes a JOC element chief, administrative personnel, project management personnel, and quality assurance personnel. The JOC element assists in the development of the UPB, standard operating procedures, and internal control procedures. The UPB, technical specifications, and statement of work are attached to the Purchase Request and Commitment, which begins the actual contracting process.

After the solicitation is issued, the DPW holds a preproposal conference at least 2 weeks following the solicitation and no later than 10 days prior to the proposal due date. Tours of the facilities should be given, and any clarification or modification amendments should be sent to all potential offerors.

NAVY

Navy JOCs utilize the FAR uniform contract format; however, standard construction contract forms and clauses are required to be included. The JOC solicitation must state a maximum amount (a realistic estimate of the total that could be ordered during a contract year) and the minimum amount that the government is certain to order per contract year.

Unlike typical repair and construction contracts, the JOC solicitation has no specific work or design identified.

Since material, labor, and equipment costs are combined in the prepriced task unit prices, the offerors can compete only on their markup. This is expressed as a multiplier (the coefficient) to be applied to the unit prices of work items required to complete the specific project. Only direct costs involved in the work performance are included in the prepriced amounts; the coefficient must cover everything else. Any item left out may be cause for the contractor to seek additional compensation during task order negotiations. Navy JOC solicitations normally specify "at a minimum" what is to be included in the coefficient.

AIR FORCE

Proposed SABER contract actions are required to be published in the *Commerce Business Daily*, according to FAR 5.101. The Air Force also encourages the use of presolicitation publications and preproposal conferences.

Each SABER RFP should follow the format of a large construction solicitation. Specifically, an RFP should include the following components:

- Section B
  - Factors that generally make up the coefficients
  - Instances where two or more coefficients may be required
  - Instructions for incorporating Davis-Bacon Act labor rate updates (the SABER contracting officer should establish an economic price adjustment clause)
- Section C
  - Scope and nature of the requirement
  - Contract specifications and the UPB
  - Sample task order calculation

- ➤ Level of architectural and drafting support that will be required of the contractor.

While developing an RFP, the contracts staff should consider the following:

- ◆ The first contract performance period is 12 months, and it does not have to be tied to the beginning of a fiscal year. Each contract performance period should specify option years.
- ◆ The contractor should be required to establish an on-base office.
- ◆ Price coefficients should be few and simple. The contract staff is advised to include a statement advising offerors that proposed coefficients must include all allowable contractor costs, including contingencies and profit. The only coefficient changes that will be allowed will be those identified by the contract's economic price adjustment clause.
- ◆ The term "overtime" should not be used when referring to nonstandard hours of work.
- ◆ Realistic contract minimums and maximums should be established.
- ◆ The contract staff should be able to establish, understand, and explain the method of option year adjustments.
- ◆ Special permit and certification requirements must be identified.
- ◆ The contract staff should consider limiting the RFP to 50 pages or less, to expedite proposal evaluation.
- ◆ Large businesses should be required to submit subcontracting plans with their initial offers.
- ◆ Bonding and ordering procedures, as decided by the SABER team, should be addressed.
- ◆ A realistic schedule should be developed for the source selection process, one that allows time for major command business and contract clearance requirements.

Source Selection

When contracts are awarded using source selection evaluation criteria, the government chooses based on who can accomplish, most advantageously for the government, the necessary work to satisfy the proposal's objectives and requirements. Price is not the only determinant. Others include the contractor's exceptions to terms and conditions, past and present performance, projected

project management ability, subcontracting support capability, and project execution and technical capability.

ARMY

The DPW is responsible for developing a source selection evaluation plan (SSEP) prior to issuing the solicitation. It includes technical requirements and evaluation criteria. The objective of the SSEP is to select the contractor that is the most credible and whose performance will best meet the Army's needs at an affordable price. Price is typically not the sole determinant. Thus, factors other than price and values that apply to that objective have to be determined prior to solicitation.

In accordance with the SSEP, the DPW personnel participate in JOC negotiations as the contracting officer's technical team. The technical team is responsible for evaluating the technical elements of the proposal.

NAVY

NAVFAC states that contract award is best accomplished using the competitive negotiation procedures described in the FAR, Defense FAR Supplement, Navy Acquisition Procedures Supplement, and NAVFAC P-68 Part 15. Best value, not lowest price, should be the primary goal. Experience, past performance, ability to manage multiple projects, quality control, staffing, subcontracting support capability, and past subcontracting practices are possible evaluation factors. NAVFAC also recommends that offerors be required to provide a sample task order proposal, based on an actual "seed project," or a mock scope of work. This information will give evaluators insight into an offeror's understanding of the estimating system, including what costs are included in the coefficient.

NAVFAC approves all pre- and postnegotiation business clearances for JOCs.

AIR FORCE

A source selection plan is a detailed document that describes the source selection process and the evaluation criteria that will be used to award SABER contracts. The Air Force encourages the use of streamlined source selection procedures as identified in AFFARS Appendix BB.

Two SABER teams—the technical team and the contracting team—compose the source selection evaluation team. It evaluates SABER proposals based on streamlined source selection procedures, except when 8(a) procedures are used.[1] Civil engineering normally leads the technical team, and operational contracting

[1]Administered by the Small Business Administration, the 8(a) program assists the development of small firms owned and operated by individuals who are both socially and economically disadvantaged. By extending government contracting preferences and other business development support, it helps these firms gain access to the economic mainstream.

normally leads the contracting team. In the streamlined source selection process, the technical considerations are more important than price. The source selection authority is the installation commander. Four suggested evaluation criteria, in order of importance, are the contractor's

- project management ability;
- subcontracting support capability and subcontract management;
- project execution, including sample projects and applicable experience; and
- price, including completeness, reasonableness, and realism.

CONTRACT ADMINISTRATION

Once the source selection evaluation has determined the successful contractor, and a contract is executed, the JOC process moves into the contract administration phase. This is when task orders can be issued, and RPMA work can begin. Following the issuance of task orders and work completion, owners inspect and accept the work completion and the contractors are paid. In this section we also discuss other elements of contract administration: adding items to the UPB, LDs, bonding, contract terms, and Davis-Bacon determinations.

Task Order Process

The task order process is essentially the same in both the Army and Navy's JOC program and the Air Force's SABER program; however the task order amounts for each military service vary. Prior to issuing a task order against a JOC or SABER contract, the contractor, government project manager, and contracting officer review the project (usually by doing a site visit), and the contractor prepares an estimate using the UPB. This is evaluated against an independent government estimate, and the contracting officer negotiates a firm price and performance period. Upon completion, a firm-fixed-price task order is issued against the JOC or SABER contract. This process, from estimation to issuance, generally takes 3 to 4 weeks. Appendix A contains a task order process flow chart.

Organizations attempt to include all possible work that will be done under the JOC in the UPB. However, every JOC organization eventually encounters some work that is not included in the UPB. Resolution of the non-prepriced items is a frustrating part of JOC administration because the non-prepriced work must be separately negotiated and then incorporated into the contract for future use; each service handles pricing on non-prepriced items differently, and has different policies on the amount of non-prepriced work that can be included in a task order.

The task order process for each service follows.

ARMY

Task orders are not issued for work less than $2,000. The AFARS recently changed, giving installation/garrison commanders authority to expand the use of JOC for projects commensurate with their project approval limits, not to exceed $2 million. This August 1996 AFARS change will provide commanders with the authority to waive the current task order limit of $300,000, provided that approval is granted prior to any discussion of the proposed projects with the contractor.

The DPW customer initiates task orders. After the JOC element chief determines that the work can be done via the JOC, the chief assigns a project manager to guide the success and timely completion of each project. The project manager sets up a scope validation meeting with the customer and the JOC contractor to review the job order and refine the scope of the project. The project manager then prepares a memorandum for record describing the details of the meeting. The contracting officer, ordering officer, or contracting officer's representative may issue a request for contractor's proposal.

Following the meeting, both the contractor and the project manager independently prepare estimates. When both are complete, the contracting officer or ordering officer evaluates it, and the project manager performs a detailed review. The contracting officer or ordering officer conducts a negotiation with the contractor to reconcile scope differences, schedule the work, and discuss other logistics.

Upon conclusion of the negotiation, the contractor accepts and signs the task order, and the contracting officer or ordering officer then signs it. An ordering officer can approve up to $25,000 worth of work, and a contracting officer can approve up to $2 million. A preconstruction meeting is scheduled, and the project manager monitors work progress and maintains job performance records.

NAVY

The task order process for the Navy is essentially the same as the Army and Air Force's process. NAVFAC has no policy on the size of task orders. The dollar limits for each individual JOC is determined by the acquisition plan, which is approved by NAVFAC. If the acquisition plan makes good business sense, NAVFAC will approve it. We reviewed one Navy JOC that had no upper dollar limit on task orders.

AIR FORCE

Task orders cannot exceed $300,000. The installation commander must approve waivers for work exceeding that amount, and waiver redelegation is generally not allowed.

SABER task order execution and administration begins with a customer-prepared statement of work. Upon review of a customer-generated work request, the civil engineering project manager issues a project order, containing a statement of work, applicable sketches, statutory cost limitations, and special instructions or limitations.

The customer, project manager or inspector, contracting officer, and contractor visit the proposed job site. The purpose is to reach consensus on the scope of work and to discuss how they will execute the project. Typically they discuss access to the job site, scheduling, scope, and required notifications.

Following the job site visit, estimates are prepared. The government estimate is prepared by the SABER project manager for task orders or modifications that exceed $25,000. (Should a scope change or estimate error occur later, the SABER program manager will provide a corrected estimate or explanation to the contracting officer.) The contractor prepares a detailed price proposal.

The contract administrator and contracting officer review the contractor's proposal and compare it to the government estimate. It is then forwarded to the program manager for a technical review and comment. Upon receipt of technical comments, the contracting officer and the program manager establish a negotiation objective, then hold the negotiation. The contracting officer does the negotiation, and the program manager provides technical advice. Reporting requirements are set for jobs estimated to exceed 60 days. A price negotiation memorandum is prepared.

Upon completion of documentation and approvals, the contracting officer issues the task order to the contractor for signature.

Inspection and Acceptance

ARMY

The JOC element makes all quality assurance inspections, and the contractor is responsible for carrying out quality control, according to a quality control plan that complies with contract requirements. Contractors typically invoice monthly but may invoice more frequently, depending on the specifics of the contract. Prior to making final payment, the JOC element should obtain a release of claims statement from the contractor.

NAVY

NAVFAC requires inspections to be conducted by government personnel who have been involved in the task order scoping. Inspection and acceptance is to follow policies specified in NAVFAC P-68, *Contracting Manual,* and NAVFAC

P-1015. In general, the level of quality assurance inspection is to at least equal that of stand-alone contracts.

AIR FORCE

The program manager makes all quality assurance inspections according to requirements set forth in Air Force Instruction 32-1023, *Design and Construction Standards and Execution of Facility Construction Projects*. Contractors typically invoice monthly but may invoice more frequently, depending on the specifics of the contract. Upon acceptance and certification of work completion, the program manager forwards inspection records to the contract administrator.

Adding Items to the Unit Price Book

ARMY

The Army refers to items that are not included in the UPB as NPP. The contractors must provide adequate information, such as two subcontractor quotes, so that the contracting office can determine whether the proposed NPP costs are reasonable. The Army limits the amount of NPP to no more than 10 percent of the task order. The HCA may approve a deviation to the AFARS if the job justifies exceeding the 10 percent cap. Coefficients from the UPB are not used for NPP.

Repetitive-use non-prepriced items may be added to the UPB for subsequent use as a prepriced item, by executing a supplemental agreement to the basic contract. These items may be added as a new line item or as a modifier to an exiting line item. Care must be taken to price the new items to reflect the same year as existing line items in the UPB to prevent a "multiple" application of escalation factors already present in the coefficient.

NAVY

The Navy refers to items that are not included in the UPB as non-prepriced line items. Navy JOCs permit issuance of task orders without competition on individual projects, because the items ordered were competed as part of the original award. Therefore, any non-prepriced items used have not been competed. If it is discovered that frequently used items are not covered by existing line items, the contract may be modified to incorporate those items by negotiating an acceptable price with the contractor, documented by a bilateral agreement.

NAVFAC requires new line items to be priced using techniques that duplicate the existing prepriced line items, if the same coefficient will be applied to reach a final task order cost. Items to be considered are material required, appropriate construction crew and the original Davis-Bacon wage rates specified in the contract, and the rental of any special equipment.

NAVFAC policy is that the percentage value of the non-prepriced component for an individual task order should be limited to no more than 20 percent.

AIR FORCE

The Air Force refers to work that is not included in the UPB as NPIs. Similar to the Army, the Air Force limits the amount of NPIs per task order to 10 percent of the value of the total task order. The installation commander may approve waivers for task orders for NPIs over 10 percent, as long as they do not exceed 25 percent. No SABER task order may be issued when the relative value of its NPIs exceeds 25 percent.

NPIs may be incorporated in the UPB for subsequent use as a priced item. For example, at Travis Air Force Base the NPIs are incorporated into the UPB by supplemental agreement, and an economic adjustment is applied to the following years based on a formula contained in the solicitation. Note that prices already in the UPB cannot be adjusted by similar supplemental agreement. A coefficient can be applied to a task order NPI when only direct costs are negotiated for the NPI.

Liquidated Damages

A common incentive for contract performance is the inclusion of a clause specifying a damage penalty for not completing work according to the terms specified in the task order. The damage penalties are called LDs because they are cash penalties that the contractor must pay, specified as a dollar amount per day of delay.

ARMY

Although the Army's policy manual does not address liquidated damages, they have been used at some installations. For example, one installation uses a daily rate of $72 for each day of delay on a task order. Installations that do not include LDs in their JOCs indicate that they have no need for them, because the contractors are concerned about annual performance reviews and know that good performance reports are the key to long-term work with the military. They also report that another way of dealing with poor performance is not exercising options.

NAVY

Previous NAVFAC policy prohibited the inclusion of LDs in JOCs for the following reasons:

- A contractor cannot refuse a task order written against the contract, so has no control over the timing, the amount, or the content of the work.
- LDs avoid possible adversarial conditions between the contractor and the government.

- The amount of LDs cannot be related to the specifics of an unknown project and therefore might be held to be a penalty as described in FAR 12.202(b).

For the above reasons, NAVFAC strongly recommends that LDs not be included in JOCs. However, LDs can be incorporated into specific task orders if special requirements or costs to the government for delay of scheduled completion can be established. If LDs are incorporated into specific task orders, the Navy negotiates them as additional non-prepriced items.

At the field activity level, we found that some activities incorporate LDs into their JOCs and some do not. Those who are against LDs state that the flexibility of a JOC is facilitated by a nonadversarial relationship and that LDs are contrary to a nonadversarial relationship. However, many activities have stated that not including LDs in the JOC removes a motivation tool for ensuring that a task order is completed on schedule. Some activities have stated that they have extreme difficulty in getting the last 5 percent of a task order completed because of the lack of LDs.

AIR FORCE

The Air Force policy is to apply liquidated damages to individual task orders, rather than to the total contract. The procedures found in FAR 12.202 and 36.206 are used to determine whether LDs will be included in a task order. For example, one Air Force base applies a penalty of $134.74 each day of delay per task order. This amount includes only applicable contractual administration charges. If equipment or facility charges are included, the amount of LDs will be increased to cover those costs.

Bonding

ARMY

The JOC solicitation defines bonding requirements. The Army requires that the initial bonding be sufficient to cover the minimum guaranteed contract amount. Additional bonding requirements may be included, based on quarterly work values up to the contract maximum amount.

NAVY

The Navy requires performance and payment bonds under JOCs. The Navy uses several approaches to meet this requirement.

One approach is to require bonding equal to the guaranteed minimum under the contract, if it is anticipated that the average work in progress is usually not more than the guaranteed minimum amount.

If higher bond amounts are required for a specific task order, the Navy policy is that those should be negotiated as non-prepriced items specific to the task order.

Another approach used by the Navy is to require bonding for all task orders over a set amount (e.g., $100,000). The bond cost can be included in the contractor's coefficient or negotiated with each task order.

Regardless of which approach is used, the solicitation and the JOC must clearly state the bonding requirement.

AIR FORCE

For SABER contracts, the initial bond amounts are based on the guaranteed minimum quantity. The contracting officer has flexibility in increasing the bond amounts during contract performance. When the amount of work in progress exceeds the existing bonds, the penal amounts of the existing bonds would be increased, or additional bonds should be obtained. FAR Parts 28 and 52 provide additional information on bonding. The Air Force bases we interviewed included bond costs both as separate line items from the coefficients and as a component of the coefficient.

Initial Contract Term and Options

ARMY

The initial contract term is usually 1 year and 2 option years. As the option years are exercised, a new minimum guarantee and associated bonding costs must be obligated. Current policy states that the contractors must propose the option year coefficients at the time of the initial offer.

NAVY

NAVFAC policy is that JOCs should use the maximum number of contract years (1 base year plus 4 option years) to preclude early resolicitation.

If the unit pricing method published by R.S. Means Company, Inc., is used, the new editions of specified R.S. Means cost manuals are to be incorporated into the contract by no-cost administrative modifications, effective upon issuance of the modification.

If the Army's UPB is used, NAVFAC policy is that offerors will be given the opportunity to propose increased coefficients for the option years to provide for any increases in wages or cost of materials when an option is exercised. If this method is utilized, the coefficient for the base period and all option years will remain fixed throughout the life of the contract. No economic price adjustment will be made to the contractor's coefficient.

Some Navy JOCs utilize the *Engineering News Record* (ENR) building cost index to adjust the coefficient when options are exercised. With this method, the offeror proposes a coefficient for the base year; the coefficient is adjusted by the ENR building cost index when options are exercised.

AIR FORCE

Initial SABER contract terms are for 12 months. The contracting officer decides how many annual option periods to offer. Generally, the Air Force recommends 3 option years.

Option year price adjustments are made according to the SABER contract. The contracting officer may either use a new UPB that has been updated to reflect current market conditions or update the coefficients using criteria and predetermined formulas in an economic price adjustment clause.

Davis-Bacon Act Determinations

ARMY

JOC solicitations explain the make-up of the government unit prices and specify what types of costs must be covered by the coefficient. Offerors are asked to specify in their JOC proposals what costs are included in their coefficients. JOC ordering officers are responsible, with the Director of Public Works, for assisting the contracting officer in technical monitoring of the contractor's performance of orders issued under JOC, including Davis-Bacon Act wage compliance. The Army does not incorporate annual Davis-Bacon wage determinations.

NAVY

NAVFAC policy states that only one Davis-Bacon wage determination shall be included in the JOC for each geographic area. The Navy does not incorporate annual Davis-Bacon wage determinations.

AIR FORCE

The Air Force incorporates annual Davis-Bacon wage determinations, which are issued by the Department of Labor, either by using a contract clause that provides for annual updates to the UPB or by adjusting the coefficients under an economic price adjustment clause.

ENVIRONMENTAL JOB ORDER CONTRACT

Another contracting tool the Navy is using is the environmental JOC (EJOC). The intention of an EJOC is to obtain environmental services by means of a firm-fixed-price, indefinite-quantity contract.

The major difference between the EJOC and JOC is that the UPB is not prepared by the government. The offerors propose costs for the three categories of contract line item numbers as follows:

- *Labor.* For each construction or service labor trade employed on the site, the contractor is reimbursed at the applicable Davis-Bacon Act or Service Contract Act wage and fringe benefit rate, plus the proposed coefficient. The Davis-Bacon wage determinations incorporated into the contract at the time of award are used for the duration of the contract, including option periods. The Service Contract wage determinations are replaced with the latest revision at the exercise of each option.

- *Material.* The offeror proposes the unit price for each specific line item of material. The unit price is burdened with all cost associated with that line item and will be used to establish the price of individual task orders.

- *Equipment.* The offeror proposes the operational unit price for each specific line item of equipment. The unit price is burdened with all costs associated with that line item and will be used to establish the price of individual task orders.

Coefficients for option years are adjusted based on the ENR building cost index.

Chapter 3
Nonmilitary Job Order Contracts

As part of our study we conducted research and interviewed organizations outside the military who use indefinite-delivery, indefinite-quantity construction contracts based on competitively bid fixed unit prices. Our purpose was to determine elements of nonmilitary programs that could be incorporated to improve the Army's JOC policies or processes.

Since the U.S. Army Corps of Engineers successfully used JOCs in the late 1980s, other nonmilitary public organizations—federal organizations, schools, cities, counties, and housing authorities—have developed their own programs that incorporate many of the military's JOC and SABER program tenets:

- The public organization invites contractors to solicit proposals or bids based on an estimated amount of work. The estimated minimum dollar value is usually stated in the solicitation, and additional work is awarded based upon performance.
- Coefficients are bid according to a unit cost book. Price decisions are made when the initial contract is awarded, and subsequent work orders placed against the contract are based on those coefficient bids.
- The contract award establishes a long-term contractual agreement, typically a 1-year term with three to five 1-year options.
- The contractor performs "light design" and construction services for repair and remodeling projects. Major renovation and new construction is generally not appropriate for JOCs.
- The contractor and the public agency work as partners; they develop detailed scope, schedule, and logistical details with the client for each work order.
- Should the public agency decide to terminate work because of unsatisfactory performance, it can simply discontinue placing work orders (once contract minimums have been met). Thus, the contractor has an incentive to maintain a satisfactory level of performance.

Other organizations refer to these programs as either job order contract, delivery order construction contract, or work order contracting programs. Although the basic tenets are the same, the nonmilitary programs do have some slight differences,

as a result of different regulations and policies. In this chapter we present how the JOC elements of the nonmilitary programs differ from those of the military.

PROPOSAL EVALUATION CRITERION

Job order contract bids are evaluated by nonmilitary organizations based on either low cost or best value.[1] In contrast, the military typically evaluates JOC and SABER proposals based on source selection criteria where performance is the primary evaluation factor and cost is only one of the factors evaluated. Organizations that select contractors based on best value believe that contractors selected on the sole criterion of low bid will inevitably have work quality or performance problems.

Most contractors typically prefer to be evaluated based on best value (performance and price) rather than solely on best price. They are convinced that low-bid procurement has led to instability in the construction industry, as well as unfair pricing, poor performance, and a higher overall or life-cycle cost.

In response to the reported industry problems caused by low cost awards, a group of contractors began to look for solutions. The contractors formed the Center for Job Order Contracting Excellence (CJE) at the Del E. Webb School of Construction at Arizona State University. The CJE was formed in 1994 with these purposes:

- Act as interface between the academic community, the job order construction industry, and potential clients.
- Act as an educational platform to perform research and educate facility managers and owners in reducing their risk and costs.
- Improve the performance of the JOC industry by providing performance data to contractors and facility owners.
- Provide owners with a reliable means of performance-based evaluation and competitive selection between JOC and more conventional methods of procurement.
- Disseminate information about JOC to potential users. Information to be provided includes contracting characteristics, advantages, and performance-based comparisons of JOC with other means of performing construction, repair, renovations, and alterations. Media contributions would

[1] Although empirical data on JOC evaluation criteria are not available, the Center for Job Order Contracting Excellence estimates that 75 to 80 percent of nonmilitary job order contracts are awarded based on lowest price.

include publications; videos; and educational presentations, seminars, and newsletters.[2]

The CJE is a third-party organization that maintains contractor performance data that owners can use as an alternative to low-bid evaluations. Its most recent survey was sent to 4,000 organizations, 70 percent of whom responded. The CJE's Performance Based Procurement System (PBPS) allows organizations to match the best performing contractors to their particular needs. The PBPS converts data into relevant information that helps owners make decisions. This patent-pending system has three main components:

- Databases of contractor performance, as defined by previous construction and contractor physical description and capability
- A spreadsheet program that converts data into a "performance line"
- A multicriterion decision-making tool that selects the best contractor with the best performance for the best cost.[3]

The CJE believes that as the performance-based sector grows, the more stable the construction industry will become. The PBPS was created to enable the growth of that sector.

BOND REQUIREMENTS

Nonmilitary organizations typically require contractors to produce large performance and payment bonds. For example, public organizations might require a successful bidder to post a bond for 75 percent of the maximum contract amount. Thus, contractors who are committed to a successful, long-term JOC partnership, and those who are equipped to provide adequate support, are eliminated from competition because they are unable to secure such large bonds or do not wish to have their bond capacity tied up for work that is not guaranteed. In contrast, because contractors who work on military JOCs are required to submit bonds for smaller amounts (for example, 50 percent of the contract minimum), a larger pool of contractors submit proposals for consideration.

MULTIPLE JOCS

Many nonmilitary organizations utilize multiple JOCs as a way of stimulating competition and avoiding overloading a single contractor. Such organizations typically do not specify minimum staffing requirements for project management.

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[2] Center for Job Order Contracting Excellence (CJE), World Wide Web site for the Del E. Webb School of Construction, http://www.eas.asu.edu/joc/ [cited July 15, 1997].

[3] CJE, *Job Order Contracting Performance,* Performance Based Studies Research Group, 1996.

In contrast, the Army, Navy, and Air Force typically have one active JOC or SABER contract at a given time (except when a new contract is executed before a previous one expires). The military also specifies minimum staffing requirements for the contractors' on-site JOC and SABER project management staffs.

The Gordian Group, Inc., located in Greenville, SC, is a firm that offers job order contracting development and implementation services to both military and non-military clients. It encourages organizations to consider multiple job order contracts, to evaluate based on low bid, and to use its proprietary JOC software. Called PROGEN, the software generates JOC documents such as the contractor's cost proposal, the owner's estimate, and other management reports and forms. The company has advised numerous clients, among them Fulton County, GA; the cities of New York, Chicago, and San Diego; the Metropolitan Rapid Transit Authority in Atlanta, GA; Los Angeles County; and Dade County Public Schools of Miami, FL.

Fulton County reports that its program (with four concurrent JOCs) works well, as long as competition is maintained. It recommends that the contract should establish specific management plans for each of the multiple JOC contractors so that the project management and administrative offices of the general contractor are staffed to meet the client's performance expectations.

We spoke with Gordian Group about the prospect of military installations using multiple JOCs. It suggested that the military could administer separate solicitations, with an exclusion from working on more than one contract at a time. "North base" and "south base" contracts could be awarded, with language indicating the contractor may be required to do work outside of its normal work area. If the north base contractor is not performing satisfactorily, the installation can put it in "the penalty box" and request the south base contractor to do some of that work. While in the penalty box, new purchase orders are not issued for 3 to 4 months. During this time, the poor performer's bond would still be held (thus tying up its bond capacity), and its staff would be idle. The nonmilitary JOC staff typically experiences an improvement in the penalty box contractor's attitude and a willingness to quickly correct performance deficiencies.

UNIT PRICE BOOK AND NON-PREPRICED ITEMS

The core components of a smoothly running JOC program are a good unit price book and a good procedure for dealing with work omitted from the unit price book. A price book needs to be thorough enough to encompass the majority of the construction activities required by an organization. There also needs to be a fair way of determining a price for work not found in the UPB, so-called non-prepriced work. In addition, once prices are established, there needs to be a fair way of incorporating the non-prepriced work into the contract.

The number of items in UPBs range from 60,000 to 97,000. Obviously, the higher the number, the less likely the organization is to encounter non-prepriced work. Like the military, nonmilitary organizations use a variety of unit price books such as those sold by R.S. Means and Gordian Group. Yet nonmilitary organizations do not appear to have the unique scope of work items that need to be identified in military UPBs, such as submarine dry dock repairs.

The formula for non-prepriced work in some nonmilitary organizations is the low subcontractor's quote plus a contractor markup of 10 percent. A minimum of three quotes must be submitted. This formula is fair and works well; the Army should consider such a formula.

LIQUIDATED DAMAGES

The majority of nonmilitary organizations we interviewed do not use LDs. Some include related language in the main contract but do not discuss liquidated damages in the work orders. Organizations that prefer not to use LDs typically have other means of dealing with poor performance, such as other non-JOCs or multiple JOCs. Prime contractors do not have a strong preference for or against LDs. If a contract includes liquidated damages, however, the contractors would also like it to include an incentive clause.

Chapter 4
Opportunities for Improvement

The JOC program can be improved with realistic processes and methods. We interviewed numerous Army, Navy, and Air Force field activities and nonmilitary organizations with diverse organizations, workloads, and geographic areas to identify the best techniques developed by field activities. During the interviews we searched for techniques and procedures that seemed to encourage productivity and customer focus.

The conclusions and recommendations we present in this chapter are process techniques and business strategies that military organizations should consider during acquisition planning. Although the FAR does not require a formal acquisition plan for construction contracts, we recommend that such a plan be prepared. Some form of acquisition planning, whether formal or informal, needs to be applied to all contract placements to ensure that the contracts accommodate the objectives and interests of all government parties involved.

SOURCE SELECTION PROCEDURES AND BEST VALUE PROCUREMENTS

The best value concept is used in competitive, negotiated contracting to select the most advantageous offer by evaluating and comparing factors in addition to cost or price. It allows offerors flexibility in selecting their best proposal strategy through possible tradeoffs between the cost and noncost evaluation factors. It should result in an award that will give the government the greatest or best value for its money. It is the preferred source selection method, having been given renewed vigor since Executive Order 12931, Federal Procurement Reform, was issued on Oct 13, 1994. It directs executive agencies to "place more emphasis on past contractor performance, and promote best value rather than simply low cost in selecting sources for supplies and services."

Acquisition Reform Principles

Best value has become a centerpiece of acquisition reform policy. It is inextricably linked with sweeping changes in specification and standards reform and the use of past performance information. Collectively, these acquisition reform elements allow the offeror greater flexibility in proposing and assessing cost and technical tradeoffs. The overall intent is to stimulate innovative thinking and techniques, obtain technological breakthroughs, and reduce life-cycle costs.

Findings

Both the Navy and Air Force have been successful at selecting JOC contractors based on best value analyses. When the Navy implemented job order contracting in 1987, a tremendous amount of training was necessary to educate the contractors and government personnel, because the procurement method—source selection with best value—was radically different from traditional contracting procedures. Initially, the Navy had to weather some protests; however, the contractors eventually learned that being the low offeror did not necessarily make them the successful offeror.

The Army also conducts best value analyses in its JOC solicitations, but there is a mindset (based on traditional contracting procedures) that the low proposer should be the successful offeror. Many source selection personnel feel compelled to select the low proposer to protect the public interest, and in fact, within recent years most JOCs awarded by the Army went to the low proposer. However, most Army activities involved in their second or third JOC used best value analyses to select the contractor for their most recent procurement.

Nontraditional contracting procedures, such as best value selection, are practical and beneficial, and merit further emphasis in Army JOCs. An 8-hour training session should be sufficient to cover the source selection course material.

ORAL PRESENTATIONS

In the last year, both government and industry have taken interest in the use of oral presentations as a substitute for a portion of the traditional written proposal in competitive negotiated procurements.

As agencies face an uncertain future—where the reality will be declining resources and increased pressure on the procurement system to deliver high-quality goods and services in a timely manner—procurement professionals are turning to innovative, and sometimes controversial, approaches to meet these challenges. Moreover, successes in government-wide and agency procurement reform initiatives and high-level support throughout the government have encouraged and motivated procurement professionals to find better ways to improve customer service. Against this backdrop, oral presentations have emerged as one approach offering to save time, staff resources, and money.

What Is an Oral Presentation?

In an oral presentation, offerors present information orally instead of in written form under the cover of a proposal. The oral presentation may be either a restatement or replication of written proposal information, or may be delivered in lieu of a written proposal. The purpose is to eliminate, or greatly reduce, the need for

written material, in cases where oral communication can convey information more meaningfully and efficiently. Its major use has been to permit evaluators to receive information about the capability of the offeror—generally demonstrating its understanding of the work or describing how it will perform the work—directly from the key members of the offeror's team who will actually perform the work. They are most often videotaped.

Advantages

Oral presentations can significantly reduce the time and costs of source selection. They avoid the trappings of lengthy written marketing pitches and essay writing contests. In addition, certain types of written proposal information, particularly in the technical and management areas, are costly to prepare and time-consuming to evaluate. Many technical and management processes often may be better conveyed and understood when explained orally or demonstrated visually.

Oral presentations also allow for greater face-to-face interaction between buyers (the government requirements personnel) and sellers (the offerors) during the proposal evaluation and selection process. Through an oral presentation, government evaluators, focusing more on personal interaction between the proposed key personnel, often gain a view of the offeror's key personnel by witnessing how they present themselves, how they work together, and how they communicate technical information to government personnel. Where key personnel, such as the project manager, are critical to the success of an acquisition, it allows for essentially a "job interview" of the proposed individual.

An additional advantage is that the oral presentation process may provide a more level playing field for offerors with expertise in satisfying the government requirement but with less experience in government proposal preparation. In the words of one agency contracting officer, an oral presentation is one way "to ferret out the proposers who know their stuff versus those who have great writers"; or, as one industry representative put it, "It substitutes real technical content for pizzazz."

Agencies have reported meaningful improvements in acquisition lead-times and resource savings in their initial efforts to use oral presentation techniques.

Drawbacks

One drawback to oral presentations is that, just as written proposals can be prepared by professional proposal writers, so too can oral presentations be prepared by professionals. There are professional salespersons who can be hired to present the proposals and who use professional storyboards to make their pitch. Yet a recent oral presentation at Fort Meade required presenters to be tradespeople who are employees of the proposed prime contractor rather than actors. A

carefully designed solicitation can help reduce drawbacks of a loosely structured oral presentation.

Applicability

The concept of oral presentations is being considered throughout the federal establishment to streamline proposal evaluation and source selection. A number of federal agencies—including the Department of Energy, the Federal Aviation Administration, the Internal Revenue Service, the Bureau of Engraving and Printing, the National Aeronautics and Space Administration, the Centers for Disease Control and Prevention, and the Nuclear Regulatory Commission—have conducted acquisition using some form of oral presentation. Both cost-plus-fixed-fee and firm-fixed-price contracts have been awarded.

Proposed revisions to FAR Part 15 encourage the use of oral presentations as a method of streamlining source selection.[1]

Oral presentations are most useful when there is a clear and reasonably complete statement of the government's requirements, and the technical and management information requested is neither voluminous nor highly complex. In this situation, such information may be more effectively presented orally than in written form.

Such presentations are particularly useful when the offeror's qualifications to perform the work, or the offeror's understanding of the requirement, is a prime evaluation criterion. Solicitations for multiple-award task order contracts may find this approach particularly valuable, since the government is literally buying a capability to perform work that will be more specifically defined after contract award.

Findings

Since the use of oral presentations as a substitute for written proposals is a relatively new concept within the government, this technique has not been used widely. Yet we did interview two activities who successfully used oral presentations to select contractors. One was a Navy regional JOC covering the Pacific Northwest, and the other was an Army JOC covering Maryland, Delaware, and parts of Virginia and West Virginia. The Navy limited the oral presentations to 2 hours and videotaped them for record purposes. They were in briefing form to explain the offeror's understanding and approach to the management capability requirements delineated in the RFP. Specifically, the offerors were required to address their corporate experience, quality control, and subcontracting

[1] Federal Acquisition Regulation; Part 15 Rewrite: Contracting by Negotiation; Competitive Range Determinations, *Federal Register,* Vol. 62, No. 93, May 14, 1997. Comments should have been submitted on or before July 14, 1997, to be considered in the formulation of a final rule.

management program. They were allowed to present written documentation only of information that was presented orally.

Oral presentations were also used to evaluate Fort Meade's most recent JOC proposals. The Fort Meade JOC office required tradespeople to deliver the presentations and limited them to 2 hours in length. Evaluators noted that oral presentations were of value because they could differentiate the quality of the proposal via oral presentations more readily than with a strictly written presentation.

The installations we interviewed that used oral presentations said they would continue to use oral presentations and would encourage others to do so. They were able to learn more about the proposer's planned project management approach and to meet the people they would actually be working with. Some installations used oral presentations as the sole evaluation tool, and others used them as a supplement to written materials. They worked well in both solicitations.

Conclusion

Oral presentations deserve consideration as an element of JOC proposal evaluations.

LIQUIDATED DAMAGES

The subject of LDs is closely connected to the subject of delays in construction contracting. Clauses regarding LDs are occasionally used in government supply or service contracts, but they are common in construction contracts. They afford the government an exceedingly valuable remedy when a construction contractor's delay is caused by its own fault.

Standard Clause

A contracting officer *may* insert the clause at FAR 52.212-5, Liquidated Damages, in any construction contract, except one that is on a cost-plus-fixed-fee basis. According to the FAR, this type of clause

> should be used only when both (1) the time of delivery or performance is such an important factor in the award of the contract that the Government may reasonably expect to suffer damage if the delivery or performance is delinquent, and (2) the extent or amount of such damage would be difficult or impossible to ascertain or prove.

Thus, LDs are intended as a substitute for actual damages for late completion or delivery of the contract work.

Enforceability

Liquidated damages must meet two criteria to be valid and enforceable. First, the amount stipulated in the clause must be a reasonable forecast of the harm that the breach of the contract (the contractor's delay) would cause to the government. Second, the harm that would result from the breach must be difficult or impossible to estimate. A clause that does not meet both of these criteria may be viewed as a penalty and therefore unenforceable. If an LDs clause is held to be unenforceable, the government may recover its actual damages for breach of contract.[2]

In government contracts, the reasonableness of the forecast is determined by looking at the situation at the time the parties executed the contract. The stipulated amount must be reasonable in light of the harm the government anticipates in the case of a breach. In other words, the per diem damages rate must not be disproportionate to the actual damages expected in the event of breach based on the government's knowledge at the time the contract was made. Liquidated damages may be assessed only when they bear some reasonable relation to the probable actual damages that the government would suffer from the contractor's breach. For example, if the government knew at the time it awarded the contract that it would not suffer any damages from late performance by the contractor, an LDs clause would be inappropriate.

These clauses have been enforced despite great discrepancies between the actual and liquidated damages. The fact that actual damages far exceed or fall far short of the liquidated amount will not necessarily invalidate an otherwise proper provision. Similarly, even LDs that exceed the contract price have been upheld, where the rate fixed in the clause was reasonable as of the time the contract was awarded. If the assessment becomes too protracted, however, a court or board may regard it as a penalty.

The second hurdle in the test of enforceability—that the harm to the government from a breach is difficult or impossible to determine accurately—is rarely a problem. Testimony by government personnel that the government could not accurately estimate its damages in the event of a delay or default is difficult for the contractor to dispute.

Findings

Liquidated damages proved to be a controversial subject during our interviews. The Navy's previous policy was to prohibit LDs in JOCs for the reasons discussed in Chapter 2. However, with the latest edition of NAVFAC P-68B, that policy was relaxed.

[2] Steffen v. U.S., 213 F.2d 266 (6th Cir. 1954).

One Navy contracting officer told us of a particular task order that included acceleration costs to ensure that the project would be completed on time to meet operational requirements. The contractor did not meet the completion date, the Navy's operational requirements were not met, and the Navy had no method to penalize the contractor. In theory, the contracting officer could stop awarding task orders to the contractor because of poor performance. However, that is not practical unless the contracting officer has other contracting vehicles available for accomplishing the work. NAVFAC's cognizant engineering field activity for this area still prohibits liquidated damages in JOCs because they are "contrary to the principles of partnering."

Another Navy contracting officer told us that she has difficulty in getting the last 5 percent of projects completed because the contractor has no incentive. In her opinion, liquidated damages would help alleviate this problem.

Conclusions

Clauses regarding LDs can be a valuable remedy to compensate the government for late completion or delivery of the contract work and, if used properly, are enforceable. Including LDs in a contract does not establish an adversarial relationship between the government and the contractor. LDs are just another element in the business relationship between the government and the contractor.

CONTRACT INCENTIVES

Incentive or award fees are not new in DoD contracting, but they typically have been reserved for contracts involving multi-million-dollar acquisitions for major weapon systems. Incentive contracts are appropriate when a firm-fixed-price contract is unsuitable and the required services can be acquired at lower cost (and, in certain instances, with improved delivery or technical performance) by relating the amount of profit or fee payable under the contract to the contractor's performance. Incentive contracts are designed to obtain specific acquisition objectives by

- establishing reasonable and attainable targets that are clearly communicated to the contractor, and
- including appropriate incentive arrangements designed to motivate contractor efforts that might not otherwise be emphasized and to discourage contractor inefficiency and waste.

When predetermined, formula-type incentives related to technical performance or delivery are included, increases in profit are provided only for achievement that surpasses the targets, and decreases are provided to the extent that the targets are not met. The incentive increases or decreases are applied to performance targets rather than to minimum performance requirements. Cost incentives, technical

performance incentives, and delivery incentives are discussed in detail in FAR 16.402, Application of Predetermined, Formula-Type Incentives.

Fixed-Price Incentive Contracts

A fixed-price incentive contract is a fixed-price contract that provides for adjusting profit and establishing the final contract price with a formula comparing total final negotiated cost to total target cost. The final price is subject to a price ceiling, negotiated at the outset. Fixed-price incentive contracts may involve a firm target or successive targets.

A fixed-price incentive contract is appropriate when

- a firm-fixed contract is not suitable;
- the nature of the services being acquired and other circumstances of the acquisition are such that the contractor's assumption of risk will provide a positive profit incentive for effective cost control and performance; or
- the performance requirements provide a reasonable opportunity for the incentives to have a meaningful impact on the contractor's management of the work, if the contract includes incentives relating to technical performance or delivery.

A fixed-price incentive contract may be used only when a determination and findings document has been executed showing that this contract type is likely to be less costly than any other type, or that it is impractical to obtain the required services of the kind or quality required without the use of this contract type (see 10 United States Code § 2306(c), 2310(b), and 2311).

Award Fee Contracts

An award fee that would be appropriate for a JOC is a fixed-price award fee (FPAF) type of contract. Although FAR Part 16 identifies only cost-plus-award-fee contracts, we cite DoD FAR Supplement 16-404-2 (709) as the basis for the authority to use FPAF contracts.

An FPAF contract looks and functions like a typical firm-fixed-price (FFP) contract with the exception of an additional pool of money initially set aside for the contractor to earn during the contract performance period. The use of award fees is designed to motivate contractors to improve the quality of their service and allow government personnel to more closely monitor a contractor's performance. Table 4-1 summarizes some of the major differences between FFP and FPAF contracts.

Table 4-1. Differences Between FFP and FPAF Contracts

FFP promotes	FPAF promotes
Motivation by contractors to cut costs	Motivation by contractors to satisfy customer
Low local command involvement	High local command involvement
Interpreting the letter of the contract	Interpreting the spirit of the contract

In general, an award fee is a potential additive to the regular profit a contractor has included in a sealed bid or negotiated contract. Therefore, no award fee should be awarded when performance is merely satisfactory and only meets contract requirements.

The award fee represents a potential fee that can be earned by the contractor. The amount earned is subjectively determined by designated government personnel through periodic evaluations of the contractor's performance using evaluation criteria set forth in an award fee determination plan. The award fee determination process is designed to protect the government and the contractor from arbitrary, unfair, or capricious evaluations by a single evaluator. However, the fee determination by the fee determination official (FDO) is a unilateral determination that is not subject to the Disputes clause of the contract.

Award fee contracts require continued and committed involvement of government personnel. The availability and support of these personnel should be considered when contemplating the use of award fee contracts. Guidelines and requirements outlined in FAR 16.305 and FAR 16.404-2 should also be used to establish and administer an award fee contract. All personnel involved in the award fee determination process should comply with the award fee provisions contained in the contract clause and the award fee plan.

Award fee provisions should focus on evaluating contractor performance in the following areas: quality of work, responsiveness, productivity improvements, and management involvement.

Findings

Of all the contracts we reviewed, the only contract that included an incentive clause was a Navy Base Operating Support (BOS) JOC. On this contract, the Navy uses the award fee to counterbalance the LD provisions. The award fee is contingent upon the contractor's compliance with contractual requirements and performance at a specified numerical rating. If the contractor fails to maintain acceptable levels of performance in all areas of the contract, it might not receive an award fee. Award fee determinations are made every 3 months to cover performance during the previous 3 months. At the end of the contract term, if any work

remains to be completed, a postcontract award fee period will be established to evaluate that effort.

AWARD FEE AMOUNT

The award fee available for the Navy JOC is 5 percent of the dollar value of the work ordered. When task orders are not completed within an evaluation period, the administrative contracting officer (ACO) will determine a percentage of completion for each incomplete task order against which the award fee rating will be applied. Upon completion, the remaining award fee applicable to the balance of the task order is eligible. Award fee does not accrue across evaluation periods. Any award fee amount available but not awarded in one evaluation period is not carried forward to the next evaluation period.

AWARD FEE DETERMINATION

A performance evaluation board (PEB) of government personnel evaluate the contractor's performance against evaluation criteria. Performance monitors make specific evaluations and submit monthly reports to the PEB. Every 3 months, the PEB submits a formal evaluation report to the fee determination official.

The contractor submits a concise, written evaluation of its own performance. This report, limited to 10 pages with no appended material, is submitted to the ACO no later than 10 calendar days after the end of the evaluation period for transmittal to the FDO.

An FDO is appointed to determine the amount of award fee to be paid to the contractor. The FDO reviews the PEB's report, the contractor's self-evaluation, and any other pertinent facts to determine the amount of award fee for the evaluation period under consideration.

PERFORMANCE EVALUATION CRITERIA

The performance evaluation criteria are project management (relative weight: 20 percent), project administration (relative weight: 10 percent), project quality control (relative weight: 15 percent), quality of project work (relative weight: 25 percent), responsiveness to project work (relative weight: 15 percent), and commitment to small business subcontracting (relative weight: 15 percent).

Conclusion

An award fee provision is an effective incentive in JOCs and follows the spirit of acquisition reform. The award fee provision can be an effective counterbalance to the perceived negative aspects of liquidated damages.

COST ESTIMATING SYSTEMS

When job order contracting was first developed in 1988, MCACES was the only estimating system available to JOC users. Since that time, the JOC concept has changed somewhat; contracting officers now have a choice of estimating systems.

Current Army policy requires that all Army installations use the MCACES UPB as the estimating system under JOC.

The Air Force uses the R.S. Means estimating system. The Navy uses both the R.S. Means and the MCACES UPB estimating systems.

R.S. Means

R.S. Means is a commercial off-the-shelf estimating system that is updated annually by the R.S. Means Company, Inc. This estimating system has been used successfully by both the Navy and the Air Force on JOCs for several years.

Some government personnel have a misconception that using the R.S. Means estimating system ends up costing the government more than if the MCACES UPB is used. In fact, however, the estimated costs for a particular project should be approximately the same, regardless of which estimating system is used. Even though the unit prices for individual line items are different between the systems, the coefficients (which are competitively negotiated) will make the necessary adjustments.

We found that some JOCs use the cost column in R.S. Means that includes overhead and profit. Others use only the bare cost column (labor, material, and equipment) in R.S. Means. Both methods are acceptable, depending upon the preference of the contracting officer.

Some Navy activities have switched from the MCACES UPB system to R.S. Means because more line items are available in that system.

ADVANTAGES

Advantages of using the R.S. Means estimating system include that it costs less (the system can be purchased for less than $1,000); it is updated annually, it includes more line items than the MCACES UPB, its costs are in line with market costs, and labor can be ordered with government-furnished materials if the bare costs method is specified.

DISADVANTAGES

If the bare cost method is specified, estimates are more difficult to prepare compared to the MCACES UPB method because materials and labor costs must be

estimated. In contrast, the MCACES UPB includes all costs in each line item. The selection of appropriate line items can be a major item of discussion during task order negotiations. Normally if there is a major difference between the government estimate and the contractor's proposal it is because of the selected line items. This problem also occurs with the MCACES UPB estimating system.

MCACES Unit Price Book

The MCACES is a proprietary system that was developed by a contractor for the Army. The MCACES UPB used under JOC is a national database UPB developed from the MCACES. This estimating system has been used successfully by the Army and the Navy on JOCs. The Army offers courses, both basic and advanced, that follow contracting and administrative principles set forth in the *Job Order Contracting Guide.* These courses also include instruction in use of the JOC National Database UPB.

ADVANTAGES

The preparation of estimates is generally easier when the MCACES is used because the labor and material costs are lumped together in the line items.

DISADVANTAGES

The primary disadvantage of using the MCACES is the cost of developing a UPB for a specific JOC: approximately $20,000.

Another disadvantage is that the MCACES UPB does not have as many prepriced line items as the R.S. Means system. Some contracting officers are supporting large industrial activities (i.e., depot-level maintenance) whose projects are not covered by the line items in the MCACES UPB.

The MCACES UPB is not updated annually, but is applicable to a particular JOC for up to 5 years.

Some sections of the MCACES UPB are out of line (i.e., do not reflect true market costs) with the remainder of the estimating system. Two sections that were mentioned during our interviews are asbestos abatement and lead abatement.

Conclusions

Both the R.S. Means and MCACES UPB estimating systems are adequate for job order contracting. The Army should not preclude use of the R.S. Means estimating system in Army JOCs.

OPTION YEAR RENEWALS

The Army requires contract proposals to have bid coefficients for the initial contract period and for options years. Specifically, AFARS 17.9004-2(g) states that solicitations shall explain the makeup of the government unit prices and specify what types of costs must be covered by the coefficient. It also says that pricing of option periods, including consideration of any wage adjustments and in lieu of any economic price adjustment provisions, shall be covered by the contractor's coefficients proposed for those periods.

This requirement forces contractors to predict market changes for each of the annual option periods and to include in their proposals coefficients that reflect those changes. Several contracting officers expressed suspicions that this requirement fosters inflated coefficients for the option years, as bidders attempt to compensate for the economic uncertainties of the future. Another office we interviewed postulated that JOCs are most profitable in the option years not only because of the economic forecasts that are built into the option coefficients, but also because contractors do not pass on the option year increases to their subcontractors.

In contrast, the Air Force and Navy do not mandate that contractors bid the yearly adjustments. The Navy's NAVFAC P-68B says that if the MCACES UPB is used, offerors will have the opportunity to propose increased coefficients for the option years. From our interviews we found that many Navy activities adjust the coefficients based on economic price adjustments provided in ENR's annual building cost index. If R.S. Means is the cost estimating system, then the Navy and Air Force incorporate the annual R.S. Means updates when the next option period is exercised.

Because of the Army's current policy requiring contractors to propose prices for a base year and 4 option years, it is possible that the proposed option year prices are escalated to cover the risk of unknown economic conditions. The Army should consider utilizing an economic price adjustment, such as ENR's building cost index, for its option year adjustments.

BASE OPERATING SUPPORT JOB ORDER CONTRACT

Navy Public Works Center San Francisco Bay awarded a BOS JOC in June 1995. The BOS JOC is a multiservice indefinite quantity, firm-fixed-price award fee contract. The geographic area covered by the BOS JOC is all federal activities in Nevada, central and northern regions of California, and the Tustin and El Torro, California Marine Corps Air Stations. Essentially the Navy can purchase all base operating support services through the BOS JOC with the exception of personal services and architect-engineer services covered under the Brooks Act.

The minimum and maximum dollar amounts in the BOS JOC are $70 million and $210 million, respectively, over 5 years. The minimum task order value is $25,000, and the maximum task order size is unlimited. The largest task order placed under the BOS JOC was $7.1 million.

A unique feature of the BOS JOC is that it includes both services covered under the Service Contract Act and construction services covered by the Davis-Bacon Act. Another unique feature is the award fee provision. The amount of award fee available for the contractor to earn is set at 5 percent of the total value of work ordered on each task order. The award fee is used as an incentive for the contractor.

The government staff administering the BOS JOC numbers 30 personnel. The amount of work executed through the BOS JOC used to require about 300 personnel when the work was accomplished using government work forces and multiple contracts.

NAVFAC's Northern Division has a BOS JOC that covers New England. The development of a BOS JOC is currently being considered by NAVFAC's Southern Division for the Jacksonville, FL, area.

Estimating System

Initially the UPB utilized under BOS JOC was the Public Works Center San Francisco Bay automated database. The UPB contained the JOC, Preventative Maintenance Inspection System (PMIS), and Emergency Service Management System (ESMS) performance standard databases and estimating systems as well as labor, equipment, and material unit price databases. JOC, PMIS, and ESMS contain and utilize DoD Engineered Performance Standards (EPS).

EPS is a performance standards database that specifies the average time necessary for a qualified craftsman working at a normal pace, following acceptable trade methods, receiving capable supervision and experiencing normal delays, to perform defined amounts of work of a specified quality. EPS task time standards include "craft data" (i.e., raw craft time necessary to perform requirements unique to specific crafts), "universal data" (i.e., task time applicable to crafts for additional material handling, ladder time, scaffolding time, traffic control time, standby/safety time, additional work location, and heavy equipment travel), and "general data" (i.e., time necessary for job preparation, craft delay allowances and travel).

Since BOS JOC was originally awarded, DoD has dropped the EPS system. Currently, R.S. Means is the estimating system that is used under BOS JOC for all construction and services.

Advantages

The primary advantage of BOS JOC is that both construction and services can be ordered under this contract vehicle. Another advantage of BOS JOC is the broad geographic area and scope covered by the contract; this enables the Navy to support numerous customers (i.e., Army, Navy, Air Force, Coast Guard, and other federal agencies). Economies of scale are incurred because of the large size of the BOS JOC. These economies allow the Navy to execute a large amount of work with a relatively small staff.

Disadvantages

The primary disadvantage of the BOS JOC involves a perception that this contract is competing for work in geographic areas of other organizations. Some activities feel that their "turf" is being encroached upon by BOS JOC.

Conclusions

The Navy's BOS JOC is a viable contracting tool that has proven itself to be a valuable asset particularly for base realignment and closure activities.

RECOMMENDATIONS

Based on our findings and conclusions, we recommend the Army do the following to improve its JOC program:

- Require JOC source selection training. All government personnel participating in the JOC source selection process should attend the training. This training would further instruct field personnel on source selection procedures and best value procurements.

- Consider using oral presentations in JOC proposal evaluations. In certain cases they could streamline the selection of the contractor and enable the installation to make a better-informed selection.

- Include LD clauses in Army JOCs. Although rarely assessed, they provide protection to the government for late completion or delivery of the contract work.

- Use an award fee or incentive provision clause to motivate JOC contractors. Such incentives are allowed by the FAR and effectively counterbalance LD provisions.

- Allow the use of the R.S. Means estimating system for Army JOCs. It is affordable, is updated annually, has an expanded list of line items, and has been successfully used by other services and organizations.

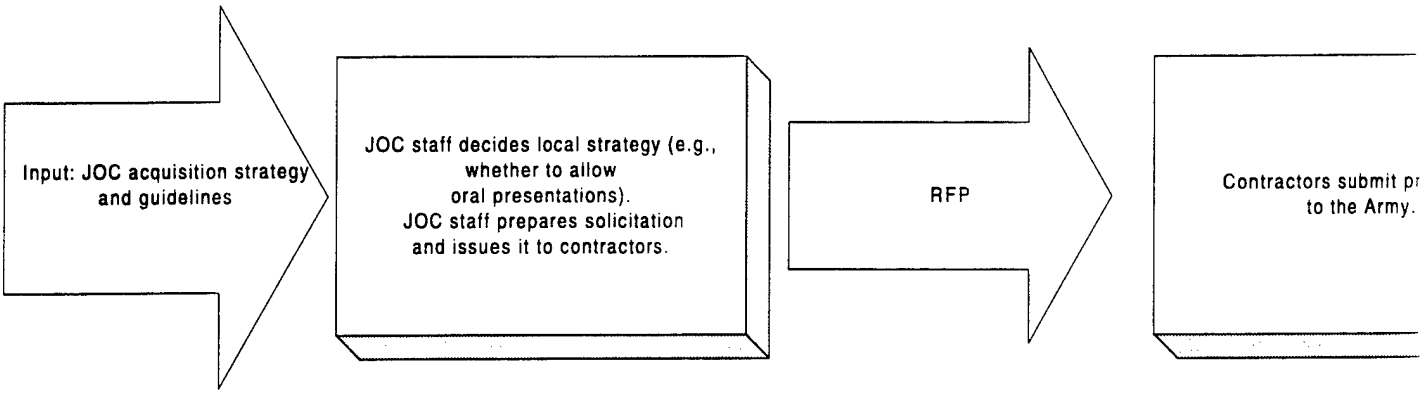
- Change the AFARS to allow economic price adjustments for option years, instead of requiring the contractors to propose each year's coefficients.

- Consider the development of BOS JOCs within the Army.

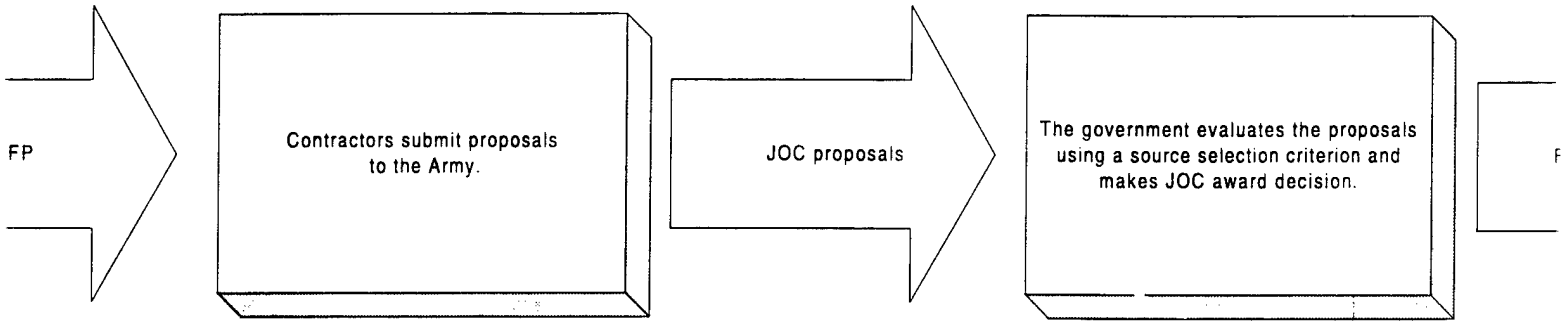
Appendix A
Typical U.S. Army JOC Process

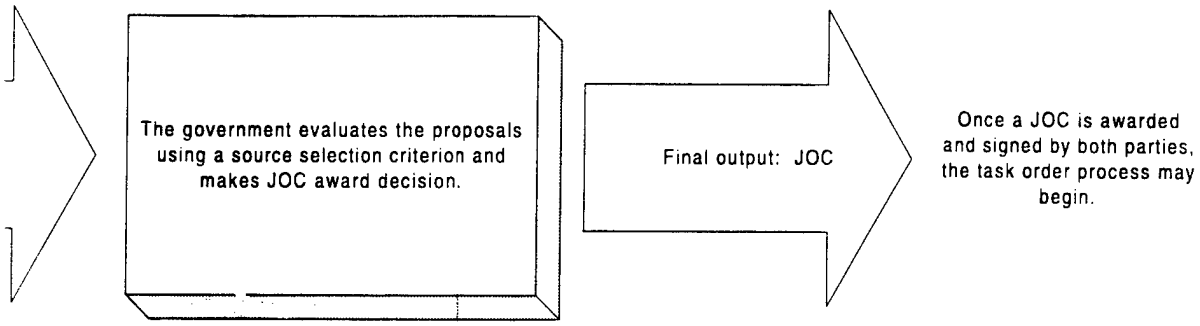
The following charts provide a visual description of the typical Army JOC contract award delivery order processes.

Typical U.S. Army JOC Award Proces



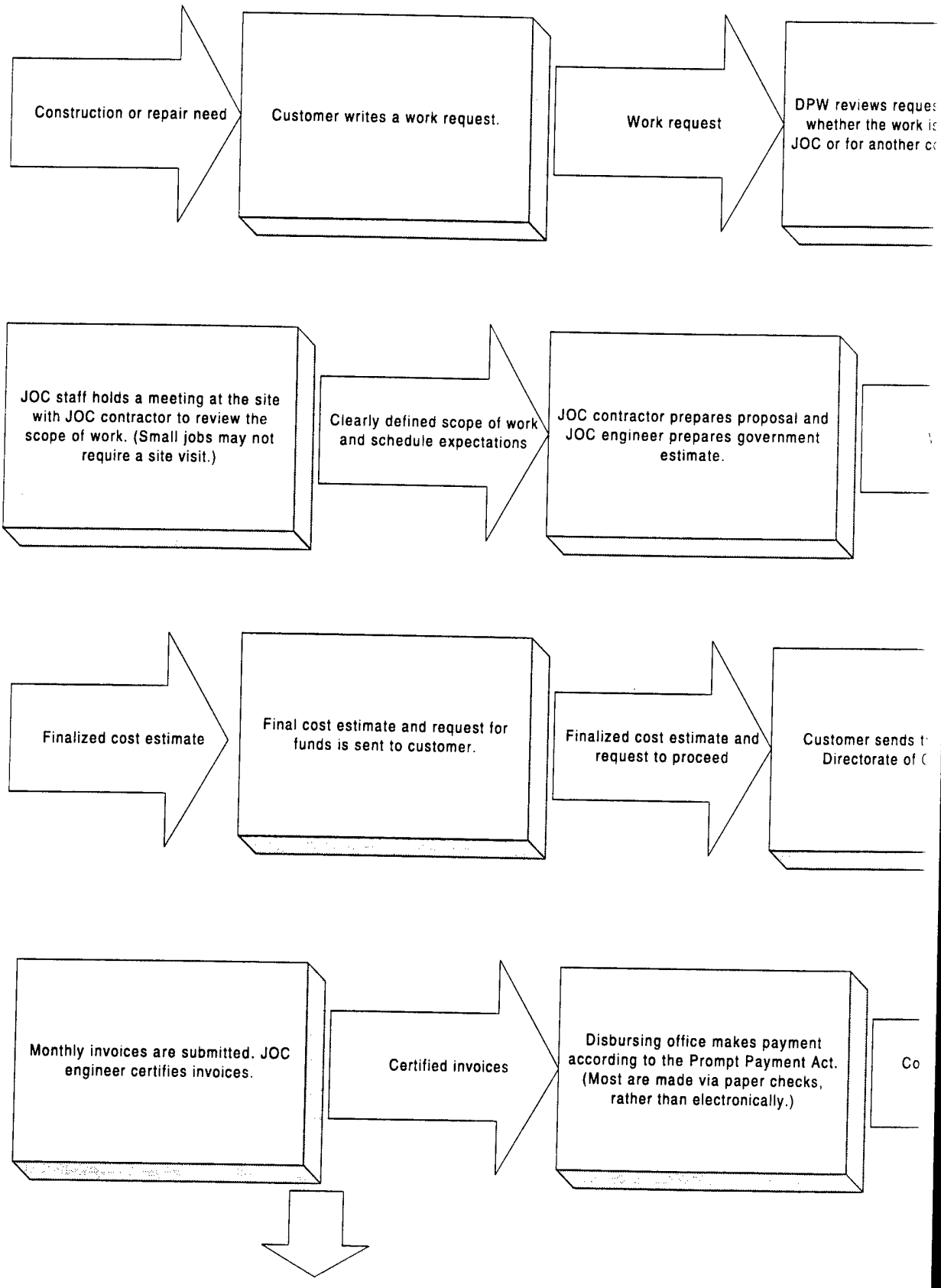
ward Process



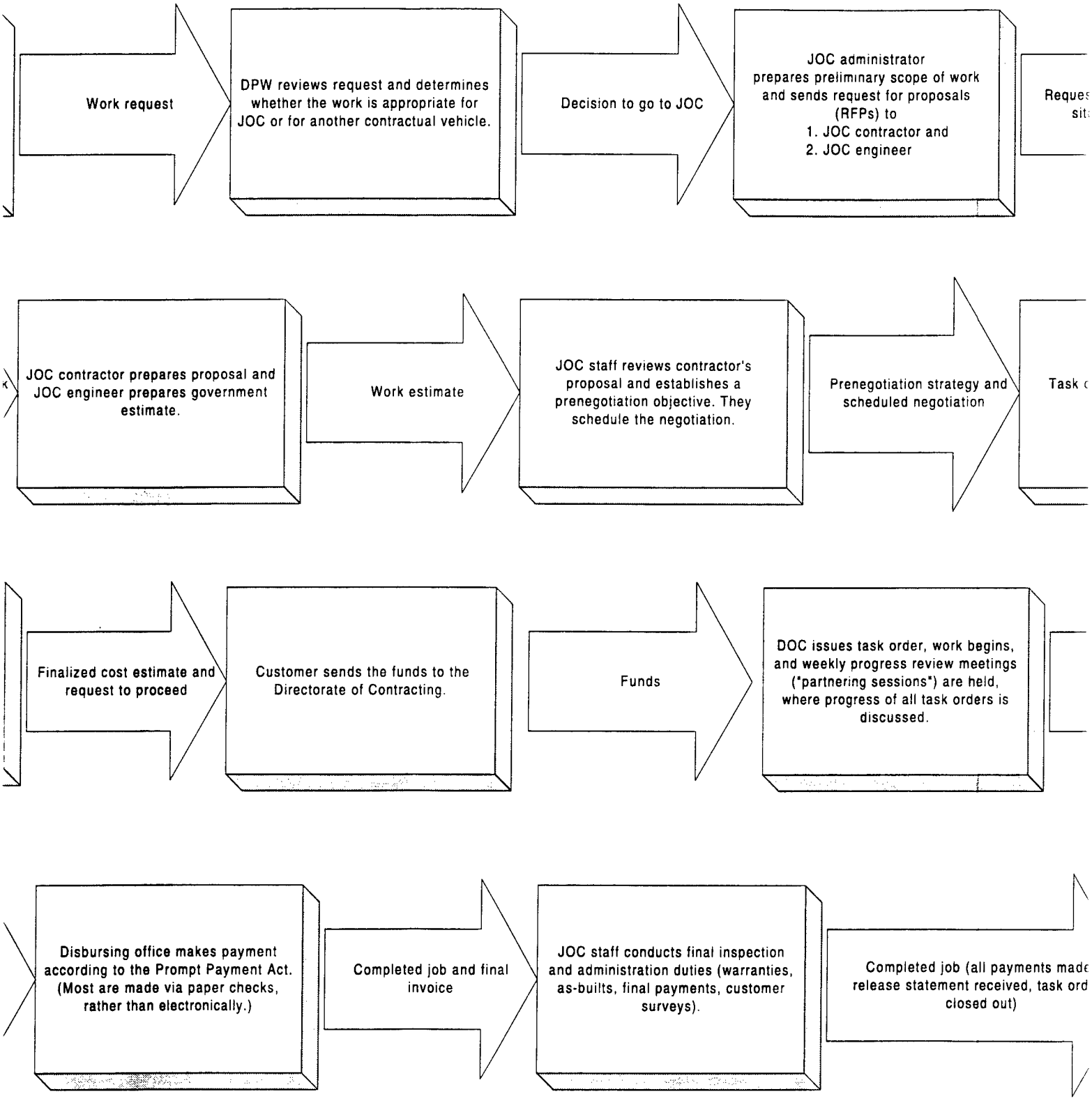

The government evaluates the proposals using a source selection criterion and makes JOC award decision.
Final output: JOC
Once a JOC is awarded and signed by both parties, the task order process may begin.

(3)

Typical U.S. Army JOC Task Orde



JOC Task Order Process



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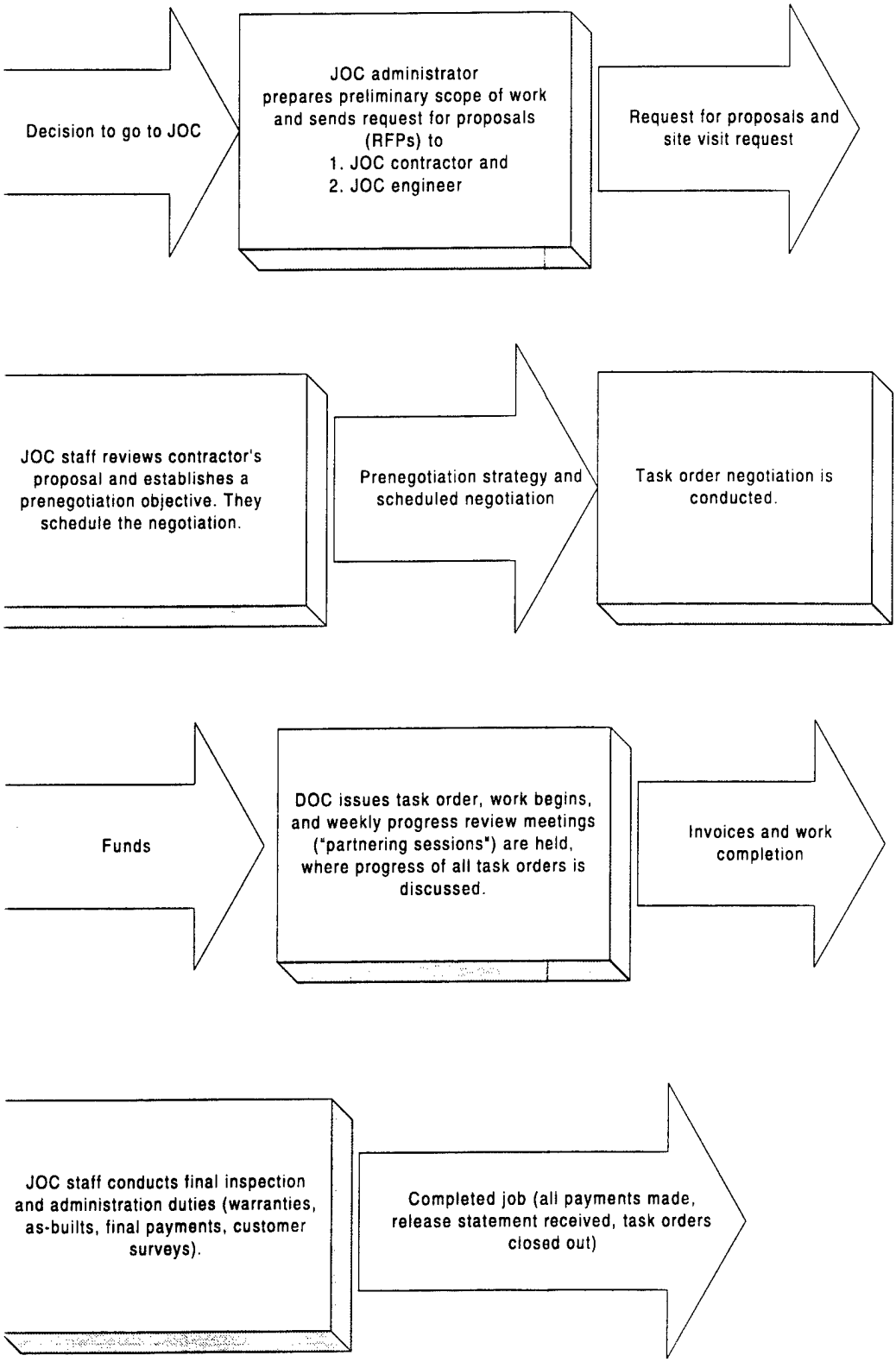
Decision to go to JOC
JOC administrator prepares preliminary scope of work and sends request for proposals (RFPs) to 1. JOC contractor and 2. JOC engineer
Request for proposals and site visit request
JOC staff reviews contractor's proposal and establishes a prenegotiation objective. They schedule the negotiation.
Prenegotiation strategy and scheduled negotiation
Task order negotiation is conducted.
Funds
DOC issues task order, work begins, and weekly progress review meetings ("partnering sessions") are held, where progress of all task orders is discussed.
Invoices and work completion
JOC staff conducts final inspection and administration duties (warranties, as-builts, final payments, customer surveys).
Completed job (all payments made, release statement received, task orders closed out)

Appendix B
U.S. Army JOC Program Data

The following table provides data on the U.S.Army's JOC program, as of October 1996. The Army compiled and provided these data.

Army installation	JOC award (as of 1 Oct. 96)	Contract minimum	Contract maximum	Standard coefficients[a]
Fort Bragg	May 96	$1 million	$15 million	1.09
Alaska	Jun 96	$1.5 million	$15 million	0.97
Aberdeen Proving Ground	Jan 95	$500,000	$10 million	
≤ $3.5 million				0.9515
≥ $3.5 million				0.9271
Fort Sill	Jun 97	$200,000	$10 million	
Main				1.09
Housing				1.09
Asbestos				1.30
White Sands Missile Range	Jun 96	$100,000	$3 million	1.12
Hawaii	May 95	$120,000	$6.5 million	1.27
West Point	Feb 95	$100,000	$3 million	0.9998
Watervliet Arsenal	Mar 95	$200,000	$2 million	1.49
Fort Benning	Jan 93	$200,000	$4 million	1.18
Fort Sam Houston	Jul 94	$100,000	$7 million	
Main				0.99
Housing				0.79
Fort Lee	Nov 95	$300,000	$3.5 million	1.0864
Fort Eustis	Nov 93	$300,000	$5 million	0.88
Fort Monroe	May 93	$600,000	$3 million	1.23 1.012
Redstone Arsenal	Jun 95	$100,000	$5 million	1.06
Pine Bluff Arsenal	Dec 92	$400,000	$4 million	1.30
Picatinny Arsenal	Jan 95	$100,000	$5 million	0.85
Fort Bliss	Mar 94	$100,000	$10 million	0.83
Anniston Depot	May 96	$200,000	$5 million	1.01
Fort Chaffee	May 96	$100,000	$2 million	1.20
Fort Leavenworth	May 94	$100,000	$3 million	0.94
Blue Grass Depot	Aug 93	$250,000	$2.5 million	
Blue Grass Depot				0.887
Blue Grass Station				0.925
NPP				1.00
Fort Riley	Dec 94	$400,000	$3.5 million	
Family Housing				1.05
Fort Riley				1.18
Fort Jackson	Sep 93	$300,000	$3 million	1.21
Tobyhanna Depot	Jan 95	$200,000	$2 million	1.00
Seneca Depot	Jun 95	$150,000	$5 million	1.02
Red River Depot	Jun 95	$100,000	$3 million	1.04
Yuma Proving Grounds	Sep 94	$100,000	$2.7 million	1.12
Fort Benjamin Harrison	Oct 93	$50,000	$5 million	1.27
Corpus Christi	Jun 95	$100,000	$3 million	0.98
Letterkenny Depot	Jul 95	$400,000	$2 million	0.97

U.S. Army JOC Program Data

ract ıum	Contract maximum	Standard coefficients[a]	Nonstandard coefficients[a]	Contractor[b]	
lion	$15 million	1.09	1.13	Gracon Corporation*	Fort Brag
illion	$15 million	0.97	0.97	Brown & Root	Alaska Di
)00	$10 million	0.9515 0.9271		R&R International, Inc.*	Aberdeen
)00	$10 million	1.09 1.09 1.30	1.09 1.09 1.30	T.P. Enterprises, Inc.*	Tulsa Dist
)00	$3 million	1.12	1.18	White Sands Construction, Inc.*	Fort Wort
)00	$6.5 million	1.27	1.40	P. E. R., Inc.*	Pacific Oc
)00	$3 million	0.9998	0.9998	Centennial	New York
)00	$2 million	1.49	1.59	JO-JA Construction, Ltd*	New York
)00	$4 million	1.18	1.23	AW & Associates*	Savannah
)00	$7 million	0.99 0.79	0.99 0.79	Brown & Root	Fort Wort
)00	$3.5 million	1.0864	1.0864	Centennial Contractors Enterprises, Inc.	Norfolk Di
)00	$5 million	0.88	0.88	J.A. Jones Mgmnt Services, Inc.	Fort Eustis
)00	$3 million	1.23 1.012	1.31 (bonding)	Snap Contracting Corporation*	Fort Eustis
)00	$5 million	1.06	1.11	Bill Harbert Construction	Redstone
)00	$4 million	1.30	1.33	Doyne*	Pine Bluff
)00	$5 million	0.85	0.8625	Noumara Entpr, Inc.*	Picatinny
)00	$10 million	0.83	0.84	Ogden Allied Eastern States Maintenance Corporation	Fort Worth
'00	$5 million	1.01	1.04	Rust Contractors	Anniston D
00	$2 million	1.20	—	Del-Jen, Inc.	Little Rock
00	$3 million	0.94	0.94	Del-Jen, Inc.	Fort Leave
00	$2.5 million	0.887 0.925 1.00	0.887 0.925 1.00	J.A. Jones Mgmnt Services, Inc.	Louisville D
00	$3.5 million	1.05 1.18	1.12 1.23	Harbert Yeargin, Inc.	Fort Riley
00	$3 million	1.21	1.26	The Childers Corporation	Jackson D
00	$2 million	1.00	1.04	Trataros Construction	Tobyhanna
00	$5 million	1.02	1.04	MCC Construction Corporation	New York
00	$3 million	1.04	1.04	Centennial Construction	Fort Worth
00	$2.7 million	1.12	1.17	The Childers Corporation	Yuma DO(
)0	$5 million	1.27	1.46	Harman Construction	Fort Harris
00	$3 million	0.98	1.00	MCC Construction	Fort Worth
00	$2 million	0.97	0.99	Trateros, Inc.	Letterkenn

Contractor[b]	Supported by
on Corporation*	Fort Bragg DOC
/n & Root	Alaska District
International, Inc.*	Aberdeen Proving Ground DOC
Enterprises, Inc.*	Tulsa District
ə Sands Construction, Inc.*	Fort Worth District
R., Inc.*	Pacific Ocean Division
ennial	New York District
A Construction, Ltd*	New York District
; Associates*	Savannah District
n & Root	Fort Worth District
ennial Contractors Enterprises, Inc.	Norfolk District
Jones Mgmnt Services, Inc.	Fort Eustis DOC
Contracting Corporation*	Fort Eustis DOC
arbert Construction	Redstone DOC
e*	Pine Bluff DOC
nara Entpr, Inc.*	Picatinny Ars DOC
n Allied Eastern States Maintenance Corporation	Fort Worth District
Contractors	Anniston DOC
en, Inc.	Little Rock District
en, Inc.	Fort Leavenworth DOC
ones Mgmnt Services, Inc.	Louisville District
ert Yeargin, Inc.	Fort Riley DOC
hilders Corporation	Jackson DOC
os Construction	Tobyhanna DOC
Construction Corporation	New York District
nnial Construction	Fort Worth District
hilders Corporation	Yuma DOC
an Construction	Fort Harrison DOC
Construction	Fort Worth District
os, Inc.	Letterkenny DOC

Army installation	JOC award (as of 1 Oct. 96)	Contract minimum	Contract maximum	Standard coefficients[a]
Detroit Arsenal	Jul 94	$500,000	$4.75 million	
<$125,000				0.99
$125,000–$500,000				0.98
Fort Leonard Wood	April 96	$100,000	$2.5 million	1.35
(88th RSC support)/NPP				1.25
Fort Leonard Wood (res. centers)	May 96	$100,000	$2.5 million	1.35
(89th RSC support)/NPP				1.25
Dugway Proving Ground	Aug 95	$50,000	$900,000	
Main				1.15
Chemical exclusion areas				1.25
Panama Canal	Mar 96	$200,000	$4 million	1.14
Military District of Washington	Dec 94	$300,000	$3 million	1.15
Rock Island Arsenal	Dec 95	$200,000	$2 million	1.25
Walter Reed Army Medical Center–Emergency	Sep 96	$500,000	$3 million	1.40
Fort Huachuca	Dec 93	$500,000	$4.3 million	0.99
Fort Rucker	Sep 96	$300,000	$9 million	1.258
Housing				1.158
NPP rate				1.1854
Fort Stewart/Hunter Army Airfield	Oct 95	$500,000	$5 million	1.16
Fort Knox	May 95	$300,000	$6 million	
Main Post				1.12
Kentucky Reserves				1.25
Ohio Reserves				1.28
Indiana Reserves				1.27
Fort Ritchie (Site R—)	Aug 94	$250,000	$2 million	1.11
Fitzsimmons Army Materiel Command	Apr 95	$200,000	$2.3 million	1.24
Fort Campbell	Jul 95	$300,000	$3 million	0.82
McAlester Ammunition Plant	Jun 95	$200,000	$3 million	
Community and Family Housing				1.34
Asbestos removal				1.65
Tooele Army Depot	Mar 95	$200,000	$2.9 million	
Main Post				0.98
All other areas				1.00
Fort Dix	Oct 95	$300,000	$4.5 million	0.89
Fort Gordon	Sep 96	$250,000	$2.5 million	
Main Post				1.08
Housing				1.06
Asbestos				1.20
Fort Polk	Aug 96	$200,000	$5 million	
Main Post				1.11
Housing				0.96
NPP rate				1.25
Fort Meade	Feb 97	$300,000	$8 million	0.90

U.S. Army JOC Program Data

ıct ım	Contract maximum	Standard coefficients[a]	Nonstandard coefficients[a]	Contractor[b]	
00	$4.75 million	0.99 0.98	0.99 0.98	J.A. Jones Mgmnt Services, Inc.	Detroit Ars
00	$2.5 million	1.35 1.25	1.38	Moseley Construction*	Fort Leona
00	$2.5 million	1.35 1.25	1.40	Moseley Construction*	Fort Leona
'0	$900,000	1.15 1.25	1.15	Moselely Construction*	Dugway D(
00	$4 million	1.14		Kunkel-Wiese, Inc.	Mobile Dis
00	$3 million	1.15	1.27	Sanders Engineering*	Baltimore I
00	$2 million	1.25	1.30	Del-Jen, Inc.	Rock Islan
00	$3 million	1.40	1.32	Stevenson Group Contractor*	WRAMC D
00	$4.3 million	0.99	0.99	Brown & Root	Fort Huach
00	$9 million	1.258 1.158 1.1854	1.258 1.158	Gracon Corporation*	Fort Rucke
00	$5 million	1.16	1.16	CSA A Joint Venture*	Fort Stewa
00	$6 million	1.12 1.25 1.28 1.27	1.17 1.25 1.28 1.27	The Childers Corporation	Fort Knox I
00	$2 million	1.11	1.11	MCC Construction, Inc.	Baltimore I
00	$2.3 million	1.24	1.244	PI Construction Corporation*	Fitzsimmor
00	$3 million	0.82	0.82	Centennial Contractors Enterprises, Inc.	Campbell I
00	$3 million	1.34 1.65	1.51 1.83	Jim Sellers Construction*	Tulsa Distr
00	$2.9 million	0.98 1.00	1.08 1.10	Beneco Enterprises	Tooele DO(
'0	$4.5 million	0.89	0.91	MCC Construction	Fort Dix DC
00	$2.5 million	1.08 1.06 1.20	1.13 1.11 1.25	The Childers Corporation	Fort Gordo
0	$5 million	1.11 0.96 1.25	1.12 0.96	Innovative Systems, Inc.*	Fort Polk D
0	$8 million	0.90	0.90	Centennial Contractors Enterprises, Inc.	Fort Meade

Contractor[b]	Supported by
Mgmnt Services, Inc.	Detroit Ars DOC
ɔnstruction*	Fort Leonard Wood DOC
ɔnstruction*	Fort Leonard Wood DOC
ɔnstruction*	Dugway DOC
ːse, Inc.	Mobile District
ıgineering*	Baltimore District
ː.	Rock Island DOC
Group Contractor*	WRAMC DOC
ɔt	Fort Huachuca DOC
ɒoration*	Fort Rucker DOC
: Venture*	Fort Stewart DOC
s Corporation	Fort Knox DOC
ːuction, Inc.	Baltimore District
ːion Corporation*	Fitzsimmons DOC
ːontractors Enterprises, Inc.	Campbell DOC
ːonstruction*	Tulsa District
ːrprises	Tooele DOC
ıction	Fort Dix DOC
; Corporation	Fort Gordon DOC
ystems, Inc.*	Fort Polk DOC
ontractors Enterprises, Inc.	Fort Meade DOC

Army installation	JOC award (as of 1 Oct. 96)	Contract minimum	Contract maximum	Standard coefficients[a]
Fort Lewis	Apr 94	$800,000	$10.5 million	0.86
Louisville District[c]	Aug 95	$250,000	$15 million	
Brown & Root				0.898
Harbert Yeargin				0.90
Centennial				1.29
Fort Irwin	Jan 97	$300,000	$4 million	1.01
Fort McPherson	Mar 95	$200,000	$1.5 million	1.12
Waterways Experiment Station	May 94	$30,000	$1 million	1.07
Fort Carson[d]	Feb 96	$350,000	$3.5 million	0.96
Fort Hood	Mar 96	$250,000	$5 million	1.09
Fort Drum	May 96	$200,000	$3 million	1.09
Fort McCoy	May 96	$450,000	$4.5 million	1.14
Fort Ord	Apr 94	$500,000	$6 million	0.90
California sites	Jul 94	$200,000	$6 million	0.859
Medical Command	Sep 96	$300,000	$2 million	
North (35 states)				
South (17 states)				

[a] Coefficients shown are for the base year of the contract.

[b] An asterisk beside a contractor's name indicates that it is a small business.

[c] Louisville also has a JOC for its civil works program.

[d] Different coefficients for nine different states.

U.S. Army JOC Program Data

ract ıum	Contract maximum	Standard coefficients[a]	Nonstandard coefficients[a]	Contractor[b]	
000	$10.5 million	0.86	1.38	Brown & Root	Seattle D
000	$15 million	0.898 0.90 1.29		Different contractors for different geographic areas	Louisville
000	$4 million	1.01	1.01	Phillips National, Inc.*	Fort Irwin
000	$1.5 million	1.12	1.12	Alpha Building Corporation*	ACC DO(
00	$1 million	1.07	1.07	Del-Jen, Inc	Waterwa
000	$3.5 million	0.96	0.98	L&M General Contracting, Inc.*	Fort Cars
000	$5 million	1.09	1.10	Innovative Systems, Inc.*	Fort Hoo
000	$3 million	1.09	1.13	Gracon Corporation*	Fort Drur
000	$4.5 million	1.14	1.17	Infrastructure Services, Inc.	Fort McC
000	$6 million	0.90	0.90	Brown & Root	Sacrame
000	$6 million	0.859	0.859	Brown & Root	Sacrame
000	$2 million		1.43 1.39	J&J Maintenance, Inc. J&J Maintenance, Inc.	Fort Wort

business.

(2)

Contractor[b]	Supported by
Brown & Root	Seattle District
Different contractors for different geographic areas	Louisville District
Phillips National, Inc.*	Fort Irwin DOC
Alpha Building Corporation*	ACC DOC
Del-Jen, Inc	Waterways Experiment Station Contracting Office
L&M General Contracting, Inc.*	Fort Carson DOC
Innovative Systems, Inc.*	Fort Hood DOC
Gracon Corporation*	Fort Drum DOC
Infrastructure Services, Inc.	Fort McCoy DOC
Brown & Root	Sacramento District
Brown & Root	Sacramento District
J&J Maintenance, Inc. J&J Maintenance, Inc.	Fort Worth District

Appendix C
U.S. Navy JOC Program Data

The following table provides data on the U.S. Navy's JOC program, as of February 1997. The Navy compiled and provided these data.

Navy activity	Not-to-exceed amount[a]	Terms	Delivery order minimum	Delivery order maximu
EFA West	$5 million	60 months	$2,000	$300,000
Northern Division	$150 million	Base plus 4 option years	$300,000	$3 million
EFA West	B–$6.5 million 1–$4.4 million 2–$2 million (to date)	60 months	$1,000	$1 million
EFA Midwest	$7.5 million	60 months	$500	$150,000
EFA Midwest	B–$6 million 1–$7 million 2–$7 million 3–$7 million 4–$7 million	60 months	$20,000	$500,000
PWC Pensacola	B–$4 million 1–$5 million 2–$5 million 3-$5 million 4-$5 million	60 months	$10,000	$500,000
Southwestern Division	$8 million	21 Jul 95–20 Jul 96 plus 2 option years	$2,000	$300,000
EFA Northwest	$4.5 million	60 months	$2,500	$500,000
EFA Northwest	$3.2 million	36 months	$2,500	$500,000
Pacific Division	$9 million	36 months	$2,000	$1 million
Pacific Division	$8 million	36 months	$15,000	$1 million
PWC Pearl	$12 million	60 months	$15,000	$1 million
PWC San Francisco	$15 million	Base (15 months) plus 4 12-month options	$2,000	$500,000

U.S. Navy JOC Program Data

s	Delivery order minimum	Delivery order maximum	Delivery order average	Database	Coefficients[a]	Ac
	$2,000	$300,000	$100,000	Means	Norm–1.10% Other–1.25%	Non
option	$300,000	$3 million	$152,000	Means construction cost data and Means facilities maintenance and repair cost data	Philadelphia–1.02% New London/Portsmouth–1.04%	Type Type PWC minis
	$1,000	$1 million	$70,000	UPB	Norm–1.175% Other–1.205%	4%
	$500	$150,000	$80,000	UPB	B Norm–1.147% B Other–1.29% 1 Norm–1.255% 1 Other–1.412%	Not a
	$20,000	$500,000	$110,000	Means for Windows	Norm–1.04% Other–1.10%	$25, tive c
	$10,000	$500,000	Not available	Means	Not available	15%
Jul 96 years	$2,000	$300,000	$73,000	Not available	Norm–1.12% Other–1.17% Heavy and highway: Norm–1.30% Other–1.35%	None
	$2,500	$500,000	$67,000	Means	0.99%	6%
	$2,500	$500,000	$77,000	Means	0.98%	None
	$2,000	$1 million	$42,000	UPB	Regular time–1.39% Premium time–1.64%	12%
	$15,000	$1 million	$500,000	PACE	Prepriced–0.9884% Non-prepriced–1.1218%	FY95 FY96
	$15,000	$1 million	$156,000	PACE	Prepriced–0.979% Non-prepriced–1.2205%	FY95 FY96
ıths) ıth	$2,000	$500,000	$100,000	ACE	Norm–0.7977% Other–0.7977%	None

rage	Database	Coefficients[a]	Administrative fee	Contract number
	Means	Norm–1.10% Other–1.25%	None	N62474-93-D-7900, Construction, alteration, and repair
	Means construction cost data and Means facilities maintenance and repair cost data	Philadelphia–1.02% New London/Portsmouth–1.04%	Type II–13% Type I (ROICC)–8% PWCDET–1.5% administrative	N62472-96-D-9999, BOS JOC, PWCDET Philadelphia
	UPB	Norm–1.175% Other–1.205%	4%	N6247-93-D-8600, JOC, NAS China Lake, CA
	UPB	B Norm–1.147% B Other–1.29% 1 Norm–1.255% 1 Other–1.412%	Not available	N62467-92-D-0932, JOC, NSWC Crane
	Means for Windows	Norm–1.04% Other–1.10%	$25,000 administrative charge	N68950-95-D-9000, JOC, Great Lakes, IL
	Means	Not available	15%	N65114-95-R-2029, IQ for alterations and repairs at NAS complex, Pensacola region, Alabama, Mississippi, Georgia, and Florida
	Not available	Norm–1.12% Other–1.17% Heavy and highway: Norm–1.30% Other–1.35%	None	DAADO1-94-D-0210, JOC, MCAS Yuma
	Means	0.99%	6%	N44255-93-D-4049, JOC for government facilities at Puget Sound NSY, Bremerton, WA
	Means	0.98%	None	N44255-95-D-6041, JOC for government facilities at NAS, Whidbey Island, Oak Harbor, WA
	UPB	Regular time–1.39% Premium time–1.64%	12%	N62742-91-D-0502, JOC, PWC Guam
	PACE	Prepriced–0.9884% Non-prepriced–1.1218%	FY95–13% FY96–11.3%	N62755-94-D-2760, JOC for utility projects, Oahu, HI
	PACE	Prepriced–0.979% Non-prepriced–1.2205%	FY95–13% FY96–11.3%	N62755-94-D-2778 JOC, PWC Pearl, HI
	ACE	Norm–0.7977% Other–0.7977%	None	N68378-93-D-8743 IQ JOC, San Francisco, CA

Navy activity	Not-to-exceed amount[a]	Terms	Delivery order minimum	Delivery order maxi
PWC San Francisco	B–$25 million 1–$45 million 2–$40 million 3–$50 million 4–$50 million	Base (15 months) plus 4 12-month options	$25,000	None
EFA Midwest	$10 million	60 months	$500	$150,000
PWC Pensacola	B–$2 million 1–$3 million 2–$5 million	Base (13 months) plus 2 12-month options	$500	$150,000
PWC Washington	$7.5 million	12 months	$2,000	$500,000
EFA Chesapeake	$35 million	60 months	$2,000	$1.5 million
Southern Division	$2.4 million	13 months	$5,000	$150,000
Southern Division	$5 million	36 months	$250	$1 million
Southern Division	$10 million per year	60 months	$25,000	$500,000
Southern Division	$7 million	37 months	$25,000	$375,000
Southwestern Division	B–$3 million 1–$3 million 2–$3 million	Base (15 months) plus 2 12-month options	$2,000	$500,000
Southwestern Division	$5 million	30 Oct 91–30 Sep 92 plus 4 12-month options	$2,000	$1 million

Notes: EFA = Engineering Field Activity, PWC = Public Works Center, DET = detachment, M&R = mainte
Corps Air Station, NSY = Naval Shipyard, ACE = Advanced Construction Estimating, USACE = U.S. Army C

[a] B = base year, 1 = first option year, 2 = second option year, etc.

	Delivery order minimum	Delivery order maximum	Delivery order average	Database	Coefficients[a]	Admini
)	$25,000	None	Not available	Facility management	Regular–1.07% Other–1.11%	None
	$500	$150,000	Not available	Means	Not available	None
)	$500	$150,000	$88,000	UPB	Norm–1.22% Other–1.32%	15%
	$2,000	$500,000	$130,000	USACE UPB	Norm–0.845%	13.40%
	$2,000	$1.5 million	$87,000	UPB	B–0.89%	8.00%
	$5,000	$150,000	$56,000	Industrial/commercial standards for maintenance, repair, and construction of government facilities	Norm–1.19% Other–1.24% Bond–$1,500	None
	$250	$1 million	$120,000	UPB	Norm–1.25% Other–1.35%	None
	$25,000	$500,000	Not available	Means	Norm–0.67% Other–0.72%	4%
	$25,000	$375,000	$133,000	Means	Norm–0.89% Other–0.94%	$7,000 to and awar
	$2,000	$500,000	$110,000	Not available	B Norm–1.16% B Other–1.21% 1 Norm–1.19% 1 Other–1.25% 2 Norm–1.26% 2 Other–1.30%	None
h	$2,000	$1 million	$50,000	Not available	B–1.099% 1–1.1636% 2–1.1947% 3–1.2033% 4–1.2033%	None

ic Works Center, DET = detachment, M&R = maintenance and repair, ROICC = Resident Officer in Charge of Construction, IQ = indefinite quantity, I
ed Construction Estimating, USACE = U.S. Army Corps of Engineers, NDW = Naval District Washington, SFB, NSWC = Naval Surface Weapons Ce
on year, etc.

Database	Coefficients[a]	Administrative fee	Contract number
Facility management	Regular–1.07% Other–1.11%	None	N68378-95-D-5000 BOS JOC, San Francisco Bay
Means	Not available	None	N68950-95-D-5000, JOC, Crane, IN
UPB	Norm–1.22% Other–1.32%	15%	N65114-92-D-2029, JOC, Pensacola, FL
USACE UPB	Norm–0.845%	13.40%	N68925-95-D-A197, JOC, NDW
UPB	B–0.89%	8.00%	N62477-94-D-0071, JOC for various activities within NDW
Industrial/commercial standards for maintenance, repair, and construction of government facilities	Norm–1.19% Other–1.24% Bond–$1,500	None	N62467-93-D-0896 JOC, Marine Corps Depot, Parris Island, SC
UPB	Norm–1.25% Other–1.35%	None	N61467-92-D-0583 JOC, NWS Charleston, SC
Means	Norm–0.67% Other–0.72%	4%	N61467-95-D-0959
Means	Norm–0.89% Other–0.94%	$7,000 to write, solicit, and award	N62467-94-D-1113 JOC, NAS Dallas/Ft. Worth, TX
Not available	B Norm–1.16% B Other–1.21% 1 Norm–1.19% 1 Other–1.25% 2 Norm–1.26% 2 Other–1.30%	None	N62474-90-D-5661, JOC, EL Toro and Tustin
Not available	B–1.099% 1–1.1636% 2–1.1947% 3–1.2033% 4–1.2033%	None	N68711-92-D-6173, JOC, Long Beach/Los Angeles, CA, areas

dent Officer in Charge of Construction, IQ = indefinite quantity, NAS = Naval Air Station, MCAS = Marine District Washington, SFB, NSWC = Naval Surface Weapons Center.

Appendix D
JOC Comparison Matrix

Table D-1 compares the JOC activities of the Army, Navy, and Air Force.

Table D-1. Comparison of JOC Activities

JOC activity	Army	Navy	Air Force
Applicable regulation	FAR, AFARS Part 17.90	FAR, DFAR, and NAPS	FAR, AFFARS Appendix DD
Agency policy manual, in addition to the regulation?	Yes, *Job Order Contracting Guide*	Yes, NAVFAC P-68B, *Job Order Contractoring Guide*	No
Acquisition strategy required?	Yes, and acquisition planning is required if annual JOC value exceeds $5 million or $15 million for all years	Yes	Yes
Proposal evaluation method (source selection or low bid)	Source selection	Source selection	Source selection
Range of JOC values ($million per year)	3–10	3–10	5–12
Minimum task order value	$2,000	Determined by acquisition plan	Regulation does not specify limit, but installations discourage task orders less than $2,500
Range of task order averages[a]	$65,000–$100,000	$50,000–$500,000	$50,000–$250,000
Delivery order maximums	$300,000[b]	Determined by acquisition plan[c]	$300,000
Liquidated damages used?	Not addressed in policy manual, but have been used	Policy discourages use of liquidated damages	Not addressed in AFFARS, but have been used
Bonding required?	Yes	Yes	Yes
UPB estimating system	MCACES	MCACES and R.S. Means	R.S. Means
Davis-Bacon Act wage determinations updated annually?	No	No	Yes, through use of economic price adjustment

[a] The range of task order averages provided is based on the results of the interviews conducted for this study. The Air Force does not maintain SABER contract comparison data at the Air Staff level.

[b] An exception is discussed in Chapter 2 of this report.

[c] The Navy does not specify the limit for the size of JOC task orders.

Appendix E
Abbreviations

ACO	administrative contracting officer
AFARS	Army Federal Acquisition Regulation Supplement
AFFARS	Air Force Federal Acquisition Regulation Supplement
BOS	Base Operating Support
CJE	Center for Job Order Contracting Excellence
DOC	Directorate of Contracting
DPW	Directorate of Public Works
EJOC	environmental job order contract
ENR	*Engineering News Record*
EPS	Engineered Performance Standards
ESMS	Emergency Service Management System
FAR	Federal Acquisition Regulation
FDO	fee determination official
FFP	firm-fixed-price
FPAF	fixed-price award fee
HCA	head of the contracting activity
JOC	job order contract
LD	liquidated damage
MCACES	Micro Computer-Aided Cost Estimating System
NAVFAC	Naval Facilities Engineering Command
NPI	non-prepriced item
NPP	non-prepriced work
PBPS	Performance Based Procurement System
PEB	performance evaluation board
PMIS	Preventative Maintenance Inspection System
RFP	request for proposals
RPMA	real property maintenance activity

SABER	Simplified Acquisition of Base Engineer Requirements
SSEP	source selection evaluation plan
UPB	unit price book
USACPW	U.S. Army Center for Public Works

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Job order contracting is an innovative procurement technique designed to provide more responsive facility maintenance and repair and minor construction. It is intended to significantly reduce engineering and procurement lead-times by awarding a competitively bid, firm-fixed-price, indefinite-quantity, multitask contract to a single general contractor within a specific geographic area. JOC programs have been implemented by the military services, as well as by public, nonmilitary organizations at the federal, state, and local level, and have proved a responsive and efficient method for accomplishing quality project work. However, since the JOC programs were implemented, numerous regulatory and other policy changes have occurred, resulting in variations among the military services and nondefense organizations. This report summarizes the advantages and disadvantages of using JOCS and compares the Army's JOC policies and procedures with those of the other services and with nonmilitary organizations. In addition to reviews of existing policies and procedures, the study involved interviews with numerous military and nonmilitary organizations with diverse workloads and in various locales. The interviews provided a basis for identifying techniques and procedures that encourage productivity and a customer focus. The report recommends changes in policies and procedures that would help the Army improve its JOC program.

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